

# Entrepreneurship in Ireland 2012

## Global Entrepreneurship Monitor (GEM)



**The Annual Report for Ireland**  
PAULA FITZSIMONS & COLM O'GORMAN



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***Paula Fitzsimons***

***Colm O’Gorman***

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The GEM report is supported by Enterprise Ireland, Forfás and  
the Department of Jobs, Enterprise and Innovation.

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The GEM report is supported by Enterprise Ireland, Forfás, and the Department of Jobs, Enterprise and Innovation. The findings of this independent report, however, do not necessarily represent the views of these organisations.

Although data used in this report is collected by the GEM consortium, its analysis and interpretation is the sole responsibility of the authors. The authors, for their part, have attempted to ensure accuracy and completeness of the information contained in this publication. No responsibility can be accepted, however, for any errors and inaccuracies that occur.



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## ACKNOWLEDGEMENTS

Thanks to the sponsorship of Enterprise Ireland, Forfás and the Department of Jobs, Enterprise and Innovation, Ireland is included in the 2012 GEM research cycle. We are very grateful to our sponsors for their continued support and for the importance they place on entrepreneurship. At a time of unprecedented challenges, when policy makers focus now more than ever on the contribution that entrepreneurs can make, GEM research and analysis is in a position to provide important data to inform and shape policy choices.

The Irish GEM team would like to thank all the members of the public who participated in our survey. We are very grateful to them as without their participation, the adult population survey, on which GEM research is primarily based, could not be completed.

We are very grateful to the entrepreneurs who we first profiled in the 2005 GEM Report and who agreed to update us for this report, as part of our ten year perspective. Their interviews give an insight into their entrepreneurial experience since that time, and make for very interesting reading.

We are also grateful to all the entrepreneurs and expert informants that were consulted as part of this research. They gave generously of their time and their insights as always enriched our understanding of the changing environment for entrepreneurship in Ireland.

We thank our colleagues in the National GEM Teams, who undertake the research in each of almost seventy economies. We are also grateful to the coordination team in the Global Entrepreneurship Research Association (GERA). The coordination team manages to skillfully combine complex data from all the national teams, while ensuring robustness and academic rigour. We also acknowledge with thanks the assistance of Etain Ryan in the production of this report.

Finally, our sincere thanks go to the many readers of the GEM annual reports. By your comments it appears that many of you find the information of value in a wide variety of circumstances. We are grateful for your feedback and for your continued interest in the research.

*Paula Fitzsimons*



*Colm O'Gorman*







## AUTHORS' DETAILS

**PAULA FITZSIMONS**, the founder of Fitzsimons Consulting, which specialises in entrepreneurship and growth, has been the national coordinator for the Global Entrepreneurship Monitor (GEM) for Ireland since 2000. A recognised expert on entrepreneurship, she was an expert facilitator to the Small Business Forum and subsequently advised Forfás and the Department of Enterprise, Trade and Employment on the development of a national entrepreneurship policy.

Having been actively involved in its design and development, Paula is the coordinator and communications manager for *Senior Enterprise* which seeks to increase the engagement of those in the older age group with entrepreneurship and with enterprise more generally. This initiative is receiving support from the EU through INTERREG IVB NWE. *Senior Enterprise* is being implemented through transnational cooperation by three partners, together with nine observers from across NW Europe. The initiative has attracted a great deal of positive attention from across Europe and internationally. It is perceived as highly innovative in meeting a real need. The EU 2020 Entrepreneurship Action Plan, published in January 2013, stated '*Europe could take inspiration from programmes such as Senior Enterprise (Ireland).*' The Mid-East Regional Authority is acting as Lead Partner.

Paula is also the national director of *Going for Growth*, which is focused on peer support as a means of assisting women entrepreneurs who wish to grow their businesses. Designed to address a gap in enterprise development, the *Going for Growth* initiative is being funded under the Equality for Women Measure 2010-2013, by Enterprise Ireland and by the Bank of Ireland. The Equality for Women Measure is funded by the European Social Fund (ESF) and the Department of Justice and Equality. *Going for Growth* was included in the 2009 *Good Practice* initiatives by the European Commission and voted into the Top 10 *most beneficial to implement* of those initiatives. It was selected to represent Ireland in the *Investing in Skills* category of the European Enterprise Awards 2011.

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**COLM O'GORMAN** is Professor of Entrepreneurship at Dublin City University Business School. His research focuses on strategy in small and medium sized enterprises (SMEs), with a particular focus on the strategic attributes of high growth firms. Specifically he has studied the growth strategies of SMEs, the nature of managerial work in high growth SMEs, mission statements in SMEs, and internationalisation processes in international new ventures, and in SMEs. He has explored the emergence of high-tech firms in the context of cluster dynamics, including a study of the factors that led to the rapid emergence of the software industry in Ireland during the 1990s. He has examined how inward Foreign Direct Investment impacts on the nature and extent of entrepreneurial activity. He has investigated the barriers to the commercialisation of university-based research via entrepreneurship.

Colm has published in international peer-reviewed journals such as *Entrepreneurship and Regional Development*, *European Planning Studies*, *Journal of Small Business Management*, *International Marketing Review*, *Organizational Dynamics*, *R&D Management*, *Small Business Economics*, and *Venture Capital*. He has completed several European Union funded research projects. He is co-author of 'Enterprise in Action', a text book on entrepreneurship for Irish students. He has co-authored eight teaching cases studies on entrepreneurship published by the European Case Clearing House, including several award winning cases.

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## GEM METHODOLOGY AND DEFINITIONS

The Global Entrepreneurship Monitor (GEM) provides unique measures of the involvement of individuals in entrepreneurial activity. GEM carries out identical population surveys on an annual basis in over 69 countries.<sup>1</sup> The support of Enterprise Ireland and Forfás made possible the surveying of 2,000 people in Ireland in 2012.<sup>2</sup> GEM describes entrepreneurial activity as a process and measures different phases of this process from conception through firm birth to persistence.<sup>3</sup>

Unless otherwise stated, all rates discussed in this report are for those in the adult population aged 18-64 years inclusive.

### **Aspiring entrepreneurs**

Aspiring entrepreneurs are those who expect to start a business in the next three years. The rate is for those in the adult population aged 18-64 years inclusive.

### **Nascent entrepreneurs**

Nascent entrepreneurs are those actively planning a new venture. These entrepreneurs have done something during the previous twelve months to help start a new business, that he or she will at least part own. Activities such as organising the start-up team, looking for equipment, saving money for the start-up, or writing a business plan would all be considered as active commitments to starting a business. Wages or salaries will not have been paid for more than three months in respect of the new business. Many of these people are still in fulltime employment. The rate is for those in the adult population aged 18-64 years inclusive.

### **New business owners**

New business owners are entrepreneurs who at least part own and manage a new business that is between 4 and 42 months old and have not paid salaries for longer than this period. These new businesses are in the first 42 months after the new business has been set up. The rate is for those in the adult population aged 18-64 years inclusive.

### **Total early stage entrepreneurial activity (TEA rate)**

As its name implies, total early stage entrepreneurial activity refers to the total rate of early stage entrepreneurial activity among the adult population aged 18-64 years inclusive. In some instances, this rate is less than the combined percentages for nascent and new business owners. This is because, in circumstances where respondents qualify as both a nascent and a new business owner, they are counted only once.

### **Owner managers of established businesses**

In addition to those people who are currently involved in the early stages of a business, there are also many people who have set up businesses that they have continued to own and manage. These people are included in the established business owner index which captures the percentage of people in the population that have set up businesses that they have continued to own and manage and which has paid wages or salaries for more than 42 months. The rate is for those in the adult population aged 18-64 years inclusive.

<sup>1</sup> As part of GEM research in 2012, a total of 198,000 adults (18-64 years of age) were surveyed in 69 economies, spanning diverse geographies and a range of development levels.

<sup>2</sup> A random telephone survey was carried out in June 2012.

<sup>3</sup> Figure 1 in Section 2 illustrates the entrepreneurial process with reference to these definitions.





## FOREWORD

The Action Plan for Jobs 2013, which was published in February, contains a clear commitment to encourage entrepreneurship and support start-up activity and sets out 14 specially focused actions to continue our work to make Ireland *the* place to start a business.

To place these actions in a strategic context with a clear road map, the Government will prepare and publish a policy statement on entrepreneurship in the coming months. This statement will underpin our commitment to entrepreneurs, as we recognise the crucial role that new start-ups play in stimulating job creation, increasing competitiveness, innovation and dynamism in Ireland's enterprise base. It is vital that we create an environment where turning a good idea into a good business is a natural ambition for more people.

A twin track approach is needed. While encouraging a greater number of entrepreneurs to start sustainable businesses, we also need to support their entrepreneurial endeavours to create businesses that are innovative, capable of growth and able to match international competition on home and export markets.

Many new jobs may be expected to be created by the 19,000 people who started new businesses in Ireland in 2012. While this number could be higher, I am pleased that those who are starting a business are increasingly innovative and the majority expect to have customers in export markets.

I am particularly encouraged by the GEM results in respect of the improvement in the growth ambition and international focus evident among female entrepreneurs. This reflects well on the initiatives which have been taken in recent times with these goals in mind. The success in this area indicates that well directed targeted approaches can bear fruit.

I cannot deny that the current economic environment poses real challenges for these ambitious individuals who are starting new businesses. The Government is committed to playing its part to create an environment in which entrepreneurs can flourish and the job creation potential of their new enterprises can be maximised.

*Continued over*



*"It is vital that we create an environment where turning a good idea into a good business is a natural ambition for more people."*



## FOREWORD (CONTINUED)

*“Through the Action Plan for Jobs we are committed to continue to develop and promote a range of non-bank sources of finance to meet the needs of enterprise and ultimately support growth and job creation.”*

For Ireland’s dynamic and innovative community of entrepreneurs, access to early stage funding is vital. Over the past year we have developed a series of new finance instruments, including the Microenterprise Loan Fund, the Credit Guarantee Scheme, and the Seed and Venture Capital Scheme. Through the Action Plan for Jobs we are committed to continue to develop and promote a range of non-bank sources of finance to meet the needs of enterprise and ultimately support growth and job creation.

Informal investment activity is also an important source of funding for the enterprise sector. GEM estimates that the amounts invested in this way exceeded €350 million in 2012. The majority of these informal investors provided funds to family, friends or work colleagues who were starting a new business. The amounts involved may have been relatively small in most cases, but they provided not only financial support but an important confidence boost from close family and associates to those starting a new business.

I find the ten year perspective which the authors provide in this report most interesting. While the very high rates of entrepreneurship, which were associated with the early years of the decade, were not sustained as economic conditions became more difficult, it is heartening that the degree of innovation and the seeking out of customers on export markets has increased in the last three years.

I would like to thank the authors of the report, Paula Fitzsimons and Dr Colm O’Gorman, for their continued work in providing valuable information and insights into the entrepreneurial landscape in Ireland.

**RICHARD BRUTON T.D.**

*Minister for Jobs, Enterprise and Innovation*

May 2013



## ENTREPRENEURS FEATURED ON THE COVER

A profile of each of the following entrepreneurs is included in Section 6. The profiles are a ten year review of the entrepreneurs and their businesses. They detail what has happened to each of them since they were last profiled in GEM in 2005.

### ENTREPRENEUR: JAN BERG - MARITIME MANAGEMENT

**Activity:** The company offers ship management, maritime consultancy, marine surveying and associated maritime services and can provide bundled technical financial solutions to match specific requirements.

**Location:** Greystones, Co. Wicklow **Website:** [www.bmml.ie](http://www.bmml.ie)



### ENTREPRENEUR: ELAINE COUGHLAN - ATLANTIC BRIDGE

**Activity:** A growth equity fund focused on technology investments, with offices in Dublin, London and Silicon Valley. The firm's investors include the founders, leading institutional investors and private investors with a track record of successful technology investments.

**Location:** Dublin 2 **Website:** [www.abven.com](http://www.abven.com)



### ENTREPRENEUR: SEAN FITZGERALD - SENTENIAL

**Activity:** Sentenial is a specialist provider of SEPA payment solutions for Pan European banks and corporates. The company is recognised for its expertise and for offering the most comprehensive SEPA payments available in the market.

**Location:** Maynooth, Co. Kildare **Website:** [www.sentenial.com](http://www.sentenial.com)



### ENTREPRENEUR: MONICA NUGENT - IRELAND'S PC DOCTOR

**Activity:** Ireland's PC Doctor provides computer repairs, maintenance and website design. Its retail store sells computers, laptops and accessories.

**Location:** Donegal **Website:** [www.irelandspcdoctor.com](http://www.irelandspcdoctor.com)



### ENTREPRENEUR: JOHN O'HARE - AZOTEL

**Activity:** The company's SIMPLer system equips broadband operators with the technology and automated business processes required to build out commercially successful and highly profitable networks anywhere in the world.

**Location:** Cork **Website:** [www.azotel.com](http://www.azotel.com)



### ENTREPRENEUR: MICHAEL O'SHEA - ORION

**Activity:** A new health technology company providing wellness and fitness monitoring for a range of applications from monitoring equine athletic performance to detecting herd health issues that affect food production economics.

**Location:** Dublin **Website:** [www.orionveterinary.com](http://www.orionveterinary.com) (coming soon)



### ENTREPRENEUR: DEIRDRE UÍ CHATHMHAOIL - RÍ NA MARA

**Activity:** An award winning skincare company that produces its own range of products based on organic seaweed, which is hand harvested off the West Coast of Ireland.

**Location:** Spidéal, Co. Galway **Website:** [www.rinamara.com](http://www.rinamara.com)



### ENTREPRENEUR: DAVID WALSH - NETWATCH

**Activity:** The company uses the most advanced video processing technology to proactively monitor and protect their client's properties and assets, using live audio warnings to ward off intruders.

**Location:** Carlow **Website:** [www.netwatchsystem.com](http://www.netwatchsystem.com)





## SECTION 1

### SIGNIFICANT ASPECTS OF ENTREPRENEURSHIP IN IRELAND

#### 2012 COMPARED TO 2011

In many respects GEM research illustrates that entrepreneurship in Ireland in 2012 continued the trends noted in 2011 and 2010. Reflecting the challenging economic environment, many of these were less positive, although there were some positive trends that could be identified.

#### *Less positive trends.....*

- The general perception of opportunities for new businesses by people in Ireland continues at historically low levels and is far below that pertaining across the OECD and EU.
- The aspiration to become an entrepreneur remains low, and is far below that generally observed across the OECD and EU, at a time when the perceived need for entrepreneurs is greater than ever.
- Fewer people are currently planning and starting new businesses in Ireland. This is particularly the case among men.
- In respect of early stage entrepreneurs, Ireland's position relative to other European countries has significantly declined.
- The prevalence of early stage entrepreneurs in Ireland is at historically low levels and is half of what it is in the United States.
- The level of early stage entrepreneurs that are motivated by necessity continues at a high rate.
- A marked lowering of growth ambition may be observed among men starting new businesses.

#### *More positive trends.....*

- Successful entrepreneurs continue to be well considered in Irish society, and success at entrepreneurship is considered to confer considerable status.
- There is a growing general perception of supportive coverage by the media of entrepreneurs and their activities.
- The educational attainment level among early stage entrepreneurs in Ireland is one of the highest internationally.
- More than half of all early stage entrepreneurs are focused on overseas markets and many expect a significant number of customers to be from overseas markets.
- The growth expectations among women entrepreneurs have considerably increased and there is no longer a significant gender gap in this area.
- The prevalence of owner managers of established businesses in Ireland is higher than it is across the OECD and EU.
- The level of growth expectation among early stage entrepreneurs remains at a high level.



## A TEN YEAR PERSPECTIVE

As Ireland has been involved in the GEM research for over a decade, a ten year perspective is possible. This highlights two distinct periods - 2003 to 2008 inclusive and 2010 to 2012 inclusive, mirroring the changes in the economic environment.

The earlier period was characterised by high levels of entrepreneurial activity, with very many people perceiving opportunities to start new businesses. The culture and media were very supportive and entrepreneurship was considered a good career option.

An overall decline in the rate of early stage entrepreneurial activity, particularly among men, is apparent in the later period 2010 to 2012 compared to the earlier period. The percentage of the adult population that expects to become employers through their entrepreneurial activity has also declined. In the more recent period there has also been a decline in the rate among the general population of those stating their intention to start a business, a decline in the perception of entrepreneurship as a good career option, and a rise in entrepreneurship motivated by necessity.

Improvements in the degree of perceived innovation and intended internationalisation among those starting new businesses in the more recent period are very positive and suggest an improvement in the *quality* of the new enterprises being started. Successful entrepreneurs continue to be held in high regard.

## SECTION 2

### ENTREPRENEURSHIP IN IRELAND IN 2012

#### 2.1 INTRODUCTION

This section provides an overview of entrepreneurship in Ireland in 2012 and examines certain aspects of entrepreneurship in some detail. The findings are compared with other developed countries, in particular those that were included in the GEM 2012 cycle from across the EU<sup>4</sup> and OECD.<sup>5</sup> For ease of reference, cross country comparisons relevant to this section (Table A through to Table O ) are collected together in Section 7.

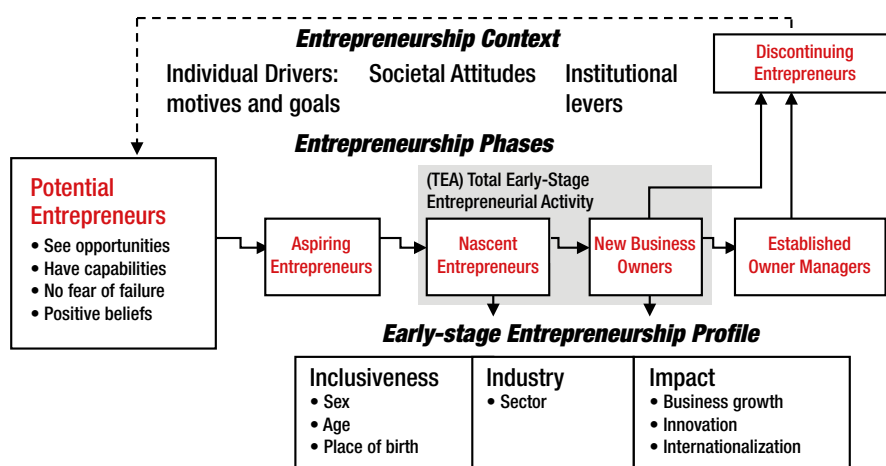
The information provided is based on the GEM research, which draws on an analysis of the facts, views and opinions gathered as part of an adult population study of 2,000 people, which was undertaken in June 2012. It also draws on the views and opinions of a panel of experts and entrepreneurs who were consulted and whose insights enriched our understanding of the prevailing entrepreneurial ecosystem (Section 2.10).

GEM research is carried out in exactly the same way in each of the sixty nine economies participating in the cycle. Accordingly, the results can be compared across countries and Ireland's relative position ascertained. For the most part, comparisons are made with OECD, EU-27 and EU-15.<sup>6</sup>

#### 2.2 THE ENTREPRENEURIAL PROCESS

GEM describes entrepreneurial activity as a process and measures different phases of this process from conception through firm birth to persistence (Figure 1).

**FIGURE 1: THE ENTREPRENEURSHIP PROCESS**



Source: Adapted from *Global Entrepreneurship Monitor 2011 Global Report*, (Kelley, D., Singer, S. and M. Herrington), page 5.

<sup>4</sup> Twenty two of the 27 EU countries are included. They are Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

<sup>5</sup> Twenty eight of the 32 OECD member countries are included. They are Austria, Belgium, Chile, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Japan, Korea, Mexico, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States.

<sup>6</sup> Fourteen of the EU-15 countries are included. They are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden and the United Kingdom.

Table 1 gives a snapshot of entrepreneurial activity in Ireland in 2012 with reference to this entrepreneurial cycle. Unless otherwise stated, all rates discussed in this report are for those in the adult population aged 18-64 years inclusive.

**TABLE 1: A SNAPSHOT OF ENTREPRENEURSHIP IN IRELAND IN 2012**

	Aspiring entrepreneurs	Nascent entrepreneurs	New business owners	Early stage entrepreneurs <sup>7</sup>	Owner managers of established businesses	Entrepreneurs discontinuing businesses <sup>8</sup>
Percentage of adult population	8.0%	3.9%	2.3%	6.1%	8.3%	1.2%
Number of people	232,000	114,000	66,000	178,000	242,000	36,000

The proportion of people in Ireland who are early stage entrepreneurs has fallen (6.1% in 2012 from 7.3% in 2011) and Ireland's ranking against other countries has declined. Ireland is now ranked 18th among the OECD countries, 14th of the EU-27 countries and 6th of the EU-15 countries.

On a more positive note, the rate at which entrepreneurs in Ireland are exiting and discontinuing their businesses has fallen. This rate is now below the average across the OECD (1.9%), EU-27 (1.8%) and EU-15 (1.6%) and is considerably lower than the rate in Ireland in 2011 (2.8%).

### 2.3 POTENTIAL ENTREPRENEURS IN THE GENERAL POPULATION

Potential entrepreneurs are found among the general population and are latent entrepreneurs. They may never act on their entrepreneurial potential but they have certain aspects in their personal context which makes them more likely than others in the population to be future entrepreneurs. They tend to know recent entrepreneurs, are alert to opportunities in their environment, believe that they have the knowledge and skills to start and successfully run a new business and are less susceptible to being deterred by fear of failure.

In 2012 in Ireland:

- One in four people (26%) believe that there are opportunities to start a business in their local area in the coming six months.<sup>9</sup>
- Over four in ten people (45%) believe that they have the skills and knowledge to start a business.
- One in three people (37%) have an entrepreneurial role model.<sup>10</sup>
- Four in ten people (41%) report that fear of failure would deter them from starting a business.

#### *Perception of opportunity*

The current recession has had a very severe negative impact on the number of people in Ireland perceiving new business opportunities in their local area. The rate in 2012 is 26%, similar to the previous two years. This rate, however, is nearly half the rate prevailing in 2007 (46%).

This dramatic fall in the perception of opportunities for new businesses is particularly marked when Ireland is compared to other countries. The rate in Ireland (26%) is below the OECD average (33%), EU-27 average (31%) and EU-15 average (34%) (Table A in Section 7).

<sup>7</sup> In some instances, this rate is less than the combined totals for nascent and new business owners. This is because, in circumstances where respondents qualify as both a nascent and a new firm entrepreneur, they are counted only once.

<sup>8</sup> Closed a business in the previous 12 months and the business was discontinued.

<sup>9</sup> The period referred to was July to December 2012.

<sup>10</sup> They know someone who started a business in the past two years.

In the Nordic countries of Sweden (66%), Norway (64%) and Finland (55%) the great majority of the general public are able to identify opportunities for new businesses. In these countries, as in many others, there has been a drop in perceived opportunities since 2011. The stabilisation of the opportunity perception rate in Ireland, although at very low levels, is relatively positive. The perception of entrepreneurial opportunities by the general public in Greece (13%), Spain (14%), Portugal (16%), and Italy (20%) during 2012 were considerably lower than they were in Ireland.

More than one third of the experts and entrepreneurs, who were consulted by GEM in 2012<sup>11</sup> as part of national key informant panels, mentioned the continuing recession and the consequent drop in consumer spending as a constraint on entrepreneurial activity.<sup>12</sup> Many noted that the recession has created a lack of business confidence and greater pessimism.

### ***Self confidence in own skills***

Over four in ten people in Ireland believe that they have the skills and knowledge to start a business. In this, Ireland (45%) is broadly similar to OECD (42%), EU-27 (42%), and EU-15 (41%) averages (Table A). This rate has remained more or less constant in recent years.

### ***Entrepreneurial role models***

In Ireland over one third of people report knowing someone who has recently set up a new business (37%). This rate has remained more or less constant in recent years.

Ireland is higher in terms of the number knowing a recent entrepreneur (37%), compared to OECD (33%), EU-27 (33%) and EU-15 (32%) averages. This is particularly noticeable relative to certain larger but more entrepreneurial countries, such as the United States where the rate is 29% (Table A).

### ***Fear of Failure***

In terms of fear of failure deterring an individual from starting a new business, a slightly lower percentage of individuals in Ireland (41%) express this view than is the norm across the OECD (44%), EU-27 (47%), and EU-15 (47%). Interestingly, the prevalence of those reporting fear of failure as an inhibitor is more prevalent in Greece (72%), Italy (57%), Spain (52%) and Portugal (52%). The rates in the UK (41%) and the US (38%) are broadly similar to those in Ireland (Table A).

## **2.4 ASPIRATION TO START A BUSINESS**

GEM research tells us that in 2012 the equivalent of over 230,000 individuals have clearly stated their intention to set up a new business in the next three years (Table 1). This represents 8% of the adult population and the rate is broadly similar to 2011.

Relative to other countries the rate is low, however (Table B). For example, the OECD average is 14.4%, the EU-27 average is 14.8% and the EU-15 average is 11.4%. The OECD and EU have experienced, however, a decline in general in 2012 in the rate of those aspiring to set up a new business.

In Ireland, the rate of those declaring their aspiration to set up a new business is half the rate evident in the United States (16.5%) and two thirds that of the UK (11.5%).

This is a matter of concern as the aspiration to set up a new business remains low, and lower than the norms across the OECD and EU, at a time when the perceived need for entrepreneurs is greater than ever.

<sup>11</sup> There are 36 experts and entrepreneurs on the 2012 Irish GEM key informant panel. Seventeen of these are entrepreneurs. The others are experts drawn from across academia and from the public and private sectors. All are well informed in this area and have considerable experience in dealing with entrepreneurs and their new ventures and /or with the ecosystem that impacts on them.

<sup>12</sup> In 2012 35% of those consulted identified the recession as a constraint. This compared to 40% in 2012.

The aspiration to set up a new business may be negatively affected not only by the significant decline in the perception of opportunities for new enterprises, referred to previously, but also by the fact that less than half the adult population (45%) considers entrepreneurship to be a good career choice. The current prevalence in Ireland of this view is considerably lower than that of many other countries. For example, the OECD average is 56%, the EU-27 and the EU-15 averages are 58% (Table C).

Successful entrepreneurs continue to be well considered in Irish society, with 81% of individuals considering that success at entrepreneurship has high status. This rate is higher than it is across the OECD (70%), EU-27 (69%) or EU-15 (72%).

The general perception that the media has been supportive in its coverage of entrepreneurs has risen slightly in 2012. It is perceived as supportive by 61% of people in Ireland. While this rate is higher than the average across the OECD (52%), EU-27 (50%) and EU-15 (52%) (Table C), the rate in Ireland has been declining year on year since 2006 and 2012 is the first year that it has risen.

The continuing high proportion of early stage entrepreneurs turning to entrepreneurship out of necessity (28%) may also be impacting on the numbers aspiring to set up a business, as it may be making entrepreneurship a less desirable option for those who have other choices. Necessity motivates a lower proportion of early stage entrepreneurs across the OECD (21%), the EU-27 (21%) and EU-15 (18%). Within the EU, Poland has particularly high levels of necessity entrepreneurship (43%), continuing the trend observed in 2011 (Table D).

## 2.5 EARLY STAGE ENTREPRENEURIAL ACTIVITY

In Ireland 2.3% of the adult population are new business owners and a further 3.9% are nascent entrepreneurs. Combining these rates mean that 6.1% of the adult population<sup>13</sup> are engaged in some aspect of early stage entrepreneurial activity (TEA) (Table 1).

**Nascent entrepreneurs** are further along the entrepreneurial development cycle than aspiring entrepreneurs in that they are actively planning a new venture, although many of them may still be in employment. Nascent entrepreneurs have done something during the previous twelve months to help start a new business, that he or she will at least part own. Activities such as organising the start-up team, looking for equipment, saving money for the start-up, or writing a business plan would all be considered as active commitments to starting a business. Wages or salaries will not have been paid for more than three months in respect of the new business. These people will not all start a new firm. The rate is for those in the adult population aged 18-64 years inclusive. The rate of nascent entrepreneurs in 2012 was 3.9% of the adult population. This equates to approximately 114,000 people.

**New business owners** are entrepreneurs that have actually set up a new business, which they at least part own and manage. The business is between 4 and 42 months old and they have not paid salaries for longer than this period. These new businesses are in the first 42 months after the new business has been set up. The rate of new business owners is 2.3% of the adult population. This equates to approximately 19,000 individuals involved in starting a new business on an annual basis. As many new businesses have multiple owners, the number of new firms started is lower.

**Total early stage entrepreneurship (TEA)** is a combination of new business owners and nascent entrepreneurs. The TEA rate in Ireland is 6.1%. The rate in 2012 (6.1%) is lower than in was in 2011 (7.3%) and is due both to a decrease in the rate of new business owners (to 2.3% from 3.1%) and nascent entrepreneurs (to 3.9% from 4.3%). The prevalence of those setting up new businesses is at historically low levels.

Relative to other countries, Ireland's rate of early stage entrepreneurial activity is generally lower or at the average (Table B). For example, relative to OECD and EU countries, Ireland has a lower than average rate of new business ownership, nascent entrepreneurship and TEA. Relative to the EU-27

<sup>13</sup> In some instances, this rate is less than the combined totals for nascent and new business owners. This is because, in circumstances where respondents qualify as both a nascent and a new firm entrepreneur, they are counted only once.

member countries, Ireland is now ranked 14th (of twenty two countries included) in terms of early stage entrepreneurial activity, having been to the fore for many years.

The rate of early stage entrepreneurs in the US (12.8%) is over twice that of Ireland and the rate in the UK is also considerably higher (9.0%).

Those in the early stages of starting a business tend to be coming from employment. This is true in Ireland as it is in other countries (Table E). In Ireland in 2012, however, the rate of early stage entrepreneurship among those in employment fell from 9.1% in 2011 to 7.7% and is lower than the average across the OECD, EU-27 and EU-15. The rate of early stage entrepreneurs among those unemployed (3.8%) is more or less the same as in 2011 and is more on a par with the averages in the comparator groups of countries.

As in previous years those living in households with high income levels tend to be the most entrepreneurial. This is true in Ireland as it is across the OECD, EU-27 and EU-15 (Table E).

The prevalence of early stage entrepreneurs with education attainment levels beyond secondary school is much higher in Ireland (73%) than it is across the OECD (49%), EU-27 (49%), or EU-15 (51%) (Table F).

## 2.6 OWNER MANAGERS OF ESTABLISHED BUSINESSES

Owner managers of established businesses are those that have set up businesses that they have continued to own and manage and which have paid wages or salaries for more than 42 months. There are a considerable number of owner managers in Ireland - almost 242,000 (Table 1). The rate of established owner managers in Ireland (8.3%) is higher than the averages across the OECD (6.7%), EU-27 (6.6%), and EU-15 (6.6%) (Table B). They can be found in households among all income levels at higher rates than is the norm internationally (Table G).

There is a greater prevalence of owner managers of established businesses in Ireland with relatively low levels of formal education (10.1%) than is the case across the OECD (6.0%), EU-27 (5.3%) or EU-15 (6.3%) (Table G).

## 2.7 ENTREPRENEURIAL TEAMS AND COLLABORATIONS

While the popular stereotype of entrepreneurs is the 'lone' entrepreneur, many entrepreneurs start new businesses as part of a team (Table H). Start-up teams of entrepreneurs in Ireland (1.7) among new business owners,<sup>14</sup> are similar in size to those across the OECD (1.8), EU-27 (1.7) and EU-15 (1.7). Among nascent entrepreneurs in Ireland, the average start-up team of entrepreneurs is larger (2.3) and is more at the average prevailing across the OECD (1.9) and EU (2). The average number of owners is lower for owner managers of established businesses (1.6). This is lower than the OECD average (1.7), but broadly similar to the EU-27 and EU-15 average (1.8).

Entrepreneurs and owner managers might collaborate with other businesses and organisations across a range of business activities. Such collaboration can be important to innovation and business development. One third of early stage entrepreneurs in Ireland worked with other businesses or organisations to produce products or services (34%) and to procure supplies (36%), with more (41%) working with other businesses or organisations to make their business more effective (Table I). In all cases the rates in Ireland are lower than the OECD, EU-27 and EU-15 averages. With respect to working with other businesses and organisations to produce products or services Ireland ranks the lowest of all OECD, EU-27 and EU-15 countries.

Less than half of owner managers of established businesses work with other businesses or organizations to produce products or services (44%); to procure supplies (35%); to make their

<sup>14</sup> Hence it is important to refer to approximately 1,600 **entrepreneurs** every month starting new businesses rather than the number of new businesses which they are starting, which is less (approximately 925).

business more effective (46%); to sell to existing customers (47%); and to sell to new customers (43%). Less than one third of owner managers of established businesses work with other businesses or organisation to create new products or services for existing customers (28%) or new customers (30%). That is, less than one-third of established owner-managers are engaged in this form of open innovation.

## 2.8 DISCONTINUED BUSINESSES AND EXITS

During the twelve month period July 2011 to June 2012, 1.2% of the population exited a business that was discontinued, while 0.5% exited a business that was continued (Table J).

The rate of exit in 2012 where the business is discontinued or closed is much lower than the rate reported in 2011 (2.8%). The rate of exit where the business was continued (0.5%) was more or less on par with the previous year.

When individuals exit from entrepreneurial activity, this may or may not result in the discontinuation of the business.<sup>15</sup> Focussing on exits where the business is discontinued, only a very small proportion is due to retirement (2%) or is a planned exit (3%). The principal reason for exit is a lack of profitability (42%). In 2011 lack of profitability was also the principal reason, though the rate was much higher (60%).

The full list of reasons cited for exiting (where the business is discontinued) is as follows: business not profitable (42%); 'personal' reasons (20%); found another job or business opportunity (7%); difficulties in getting finance (17%); retirement (2%); and 'planned' (3%). None of those questioned cited an opportunity to sell the business as their reason to leave the business (Table K). A difficulty in getting finance was cited by a greater proportion of those closing businesses in 2012 (17%), than it was the previous year (6%).

Relative to other countries, a lower proportion of entrepreneurs in Ireland reported that their former business was closed after their departure. The rate in Ireland (1.2%) is lower than the averages across the OECD (1.9%), EU-27 (1.8%) and EU-15 (1.6%). In Ireland the rate of exit where the business is continued (0.5%) is lower than the OECD average (1.0%), the EU-27 average (0.9%) and the EU-15 average (0.7%) (Table J).

## 2.9 ENTREPRENEURSHIP BY IMMIGRANTS

Early stage entrepreneurship is higher among immigrant groups (7.2%) than it is among the non-immigrant population (5.8%) (Table L). This is the case in the other EU-15 countries, with the exception of the Netherlands. Immigrant early stage entrepreneurs are typically motivated by opportunity (73%), which is also the case for non-immigrant entrepreneurs (70%).

More specifically, a higher percentage of first generation (3.0%) and second generation immigrants (2.9%) have recently started a business in Ireland, compared to the non-immigrant population (2.2%).

## 2.10 ENVIRONMENT AND ECOSYSTEM

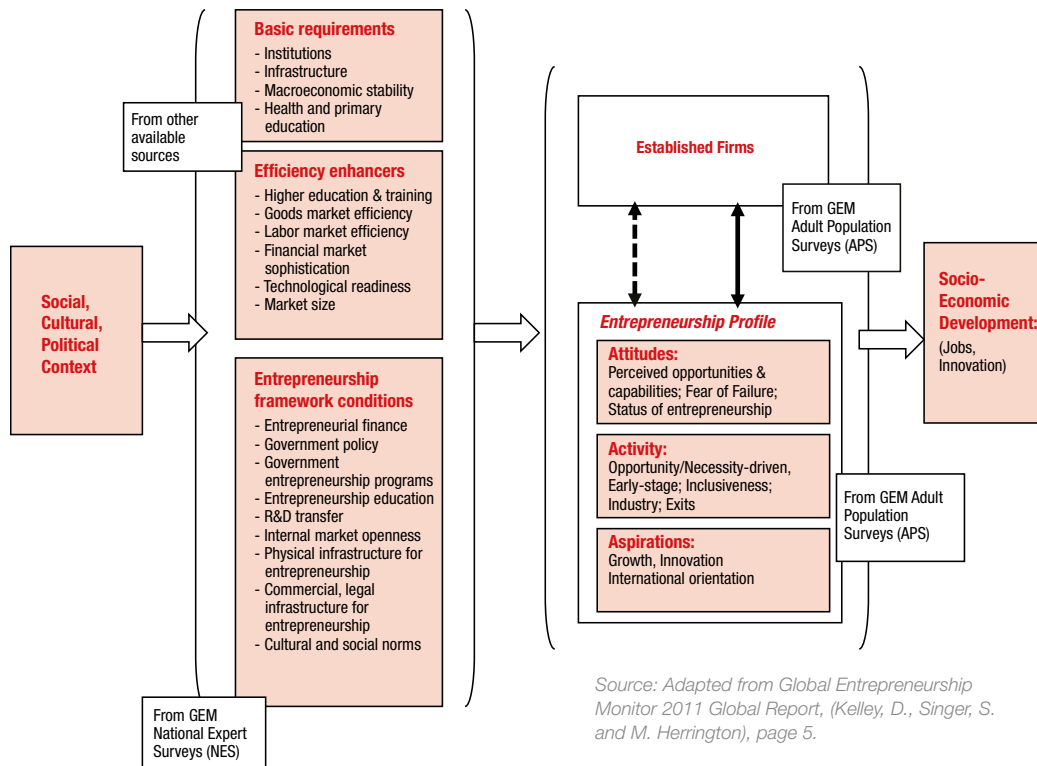
The GEM conceptual model emphasises nine entrepreneurship framework conditions (EFC) (Figure 2). These nine entrepreneurship framework conditions exist as part of a broader model of the institutional environment and its effect on entrepreneurship. The GEM model suggests that two sets of conditions—basic requirements and efficiency enhancers—are foundation conditions that influence the way a society functions and the well-being of its people (Figure 2). These have been adopted from the World Economic Forum's (WEF) Global Competitiveness Report. They are general framework conditions that effect economic activity more broadly, but they are critical to entrepreneurship because, without a solid institutional foundation, the entrepreneurship-specific conditions cannot function effectively.

<sup>15</sup> Sometimes the business is closed with the departure of the owner manager. In other cases it is passed to others within families or sold to others as a going concern.



GEM national teams collect information on the nine entrepreneurship framework conditions through a national expert survey (NES).<sup>16</sup> The determinants of entrepreneurship are complex; the extent to which specific variables can be tied to the rate or profile of entrepreneurship in a particular economy is not well understood. The institutional environment is critical to the study of entrepreneurship, however, because it creates conditions that entrepreneurs must navigate and that policy makers can address. The experts and entrepreneurs surveyed were asked to indicate their perception of the constraints and positive factors that prevailed in Ireland in 2012. They were also asked for their recommendations as to the manner in which the environment for entrepreneurship in Ireland could be further improved.

**FIGURE 2: THE INSTITUTIONAL CONTEXT AND ITS RELATIONSHIP TO ENTREPRENEURSHIP**



## PERCEIVED CONSTRAINTS

**Entrepreneurial finance:** Difficulties surrounding access and availability of finance was the framework condition singled out most frequently as a constraint by the GEM experts and entrepreneurs in 2012, as it was in 2011. Three out of every four experts and entrepreneurs consulted by the GEM team in 2012 highlighted difficulties in respect of obtaining necessary finance, mentioning in particular access to loan finance and credit facilities from the banks: *“Reluctance of banks to lend and requirement for a lot of paperwork”*. As a result, many called for the shortage of bank finance for start-up and developing businesses to be addressed and access to credit facilities to be made easier.

Several of those commenting also referred to a need to have more seed capital type funding available and the introduction of initiatives to encourage micro finance and trade credit.

**The prevailing economic climate:** In 2012 as in 2011 the experts and entrepreneurs consulted specifically mentioned the continuing recession and uncertainties surrounding the Euro as underpinning depressed economic activity levels, lack of business confidence and continuing low consumer spending. *“Economic issues have impacted on personal finances and the appetite for risk, declining economic global growth has impacted on confidence.”* This point links directly to the historically low rates of opportunity perception among the general population, which continued in 2012.

<sup>16</sup> There are 36 experts and entrepreneurs on the 2012 Irish GEM key informant panel. Seventeen of these are entrepreneurs. The others are experts drawn from across academia and from the public and private sectors. All are well informed in this area and have considerable experience in dealing with entrepreneurs and their new ventures and /or with the ecosystem that impact on them.



**Government policy:** One in three of those consulted felt that certain aspects of Government policy made it riskier for people to set up their own business. In particular the lack of a safety net for owner managers, if the business failed, was highlighted. Suggestions were made that support mechanisms should be put in place for entrepreneurs who try but fail – so called *honest failures*.<sup>17</sup>

The high rate of employers' PRSI and its impact on the cost of employing people was also highlighted. There were recommendations that employers should be given a taxation break in the early years after start-up.

There were suggestions that regulations be simplified to make it easier to open a new business and that the volume and burden of state regulation for small business be reduced. It was also suggested that the Government consider introducing a new version of the Patent Loyalty Scheme, consider some means of supporting domestic focused ventures, perhaps with a pension break for owner managers who hire staff, and advance legislation on insolvency and debt resolution.

A call was made by several of those consulted for a national strategy for entrepreneurship.<sup>18</sup>

## PERCEIVED STRENGTHS

**Government support through the development agencies:** As in 2011 the support offered through the development agencies, in particular Enterprise Ireland and the City and County Enterprise Boards, was mentioned as the main strength for entrepreneurial activity in Ireland. Particular programmes that were singled out for praise included EI's HPSU supports, the Competitive Start Fund, the supports available in the third level incubators together with CORD funding, the iGap and Springboard programmes. The supports available from EI for exporters were considered a real strength. It was suggested that EI should facilitate the growth of smaller businesses that wish to export by making its supports available in this area to those that would not meet the minimum criteria of employment (10 or more) and annual sales (€1million) within 3 to 4 years of starting up to qualify for HPSU status.<sup>19</sup> A single website with information for start-up and developing businesses was also suggested.

**High rates of unemployment:** Almost a third of those consulted identified the recession and continuing high rates of unemployment as fostering entrepreneurial activity. The view is that the high unemployment rate has reduced the fear of failure as a deterrent, as people have little to lose. *The high unemployment level is forcing people to consider starting up.* This point ties in with the continuing high levels of necessity entrepreneurship identified in the 2012 GEM research.

**Role models and the media:** Many of those consulted highlighted the feel good factor generated by role models, their positive portrayal in the media and their involvement in mentoring. The media and public acceptance of entrepreneurs, who create employment in their community, as *local heroes* was also mentioned as contributing to the positive portrayal of entrepreneurs.

**Education:** Certain aspects of education were noted as providing support to the creation of a positive environment for entrepreneurial activity. In particular the high standard of general education in the country was perceived as providing good educational foundations, although there was a call for a stronger emphasis on maths, science, and engineering. The Student Enterprise Award competition for students in secondary schools, which is run annually by the City and County Enterprise Boards, was mentioned specifically as being of particular merit in introducing students to entrepreneurial activity. There was a call for a greater emphasis on enterprise education at all educational levels and to have entrepreneurship education embedded in every third level course.<sup>20</sup>

<sup>17</sup> Action 176 of the Action Plan for Jobs 2013 commits to consider options with regard to extending benefit cover to the self-employed based on recommendations of a working group on this issue.

<sup>18</sup> The Action Plan for Jobs 2013 contains a commitment by the Government to prepare a Government Policy Statement on entrepreneurship, including youth entrepreneurship (Action 175).

<sup>19</sup> During 2012 Enterprise Ireland introduced new initiatives to encourage greater numbers of companies to become involved in exports for the first time. Access to the supports available is not confined to those who meet the HPSU criteria. <http://www.enterprise-ireland.com/en/Export-Assistance/Get-Export-Ready/>

<sup>20</sup> In April 2012 the Higher Education and Training Awards Council (HETAC) in association with higher education institutions and the Higher Education Authority (HEA) held a conference on Leaders' Perspectives on Enterprise and Entrepreneurial Education. Draft Guidelines and Key Criteria for the Review of Enterprise and Entrepreneurship Education (EEE) were launched by Mr Sean Sherlock, TD Minister for Research and Innovation at the conference.

## 2.11 INFORMAL INVESTORS

Informal investors play a vital role in the development of new businesses. In Ireland in 2012, 3.7% of adults reported having provided funds in the past three years (June 2009 to June 2012) to a new business started by someone else. This rate was broadly similar to that reported in 2011 (3.2%).

Informal investment is more pervasive in the US (5.4%), across the OECD (4.6%) and the EU-27 (4.5%). The rate in Ireland is more on a par with the EU-15 average (3.4%).

The great majority (81%) of the 36,000 individuals, who provided funds as informal investors in Ireland in 2012, provided them to family, friends or work colleagues. Instances of providing investment to entrepreneurs unknown to the investor were much less common (19%).

Over one third of the investors have first-hand experience of entrepreneurship themselves.

The average amount invested by individuals in Ireland (€29,200) during this period was similar to that in the US (€30,300) and higher than the average amount invested across the OECD (€26,400), the EU-27 (€23,400) and EU-15 (€28,700) (Table M).

## 2.12 THE AGE DEMOGRAPHICS OF ENTREPRENEURSHIP

Almost one third of the population in Ireland (32%) is in the age group which accounts for the greatest proportion of early stage entrepreneurs (25-44 years). The older age groups (45 years and over) account for almost equal numbers (34%), but as a group they tend to be less involved in early stage entrepreneurial activities.

Early stage entrepreneurial activity is less common among those below the age of 25 and over the age of fifty.

Early stage entrepreneurial activity is relatively low among the 18 to 24 age group (4.5%) and they make up just 12% of all entrepreneurs in Ireland. In Ireland, unemployment is particularly marked among those under the age of 24 (15.9%).<sup>21</sup> The 2012 rate of early stage entrepreneurship among those aged 18 to 24 shows no real difference to the 2011 outcome. It is lower than the averages across the OECD (6.3%) and EU-27 (6.6%) and is more on a par with that of the EU-15 (4.7%)<sup>22</sup> (Table N).

In recent times a series of initiatives were implemented to raise awareness and offer support specifically to those aged 50 and over who were considering becoming an entrepreneur. The results of the GEM research suggest that in 2012 a greater number of those aged 50 and over are actively considering setting up a new business or have recently done so (6%) than was the case in 2011 (4.4%). The increase is particularly marked among men (5.8% in 2011 to 8.9% in 2012). In the United States, which has a particularly high level of early stage entrepreneurs, the prevalence of those planning and starting a new business when aged over 55 is particularly high (10.2%) (Table N).

Owner managers of established businesses tend to be older. This is true in Ireland as it is in other countries (Table O).

<sup>21</sup> CSO Live Register, January 2012.

<sup>22</sup> Youth entrepreneurship is stated as a particular focus of the forthcoming Government Policy Statement on entrepreneurship. It is Action 175 of the Action Plan for Jobs 2013.



## SECTION 3

### A TEN YEAR PERSPECTIVE

#### 3.1 INTRODUCTION

As GEM research data has been collected in Ireland annually since 2003, with the exception of 2009, it allows for a ten year perspective on entrepreneurial activity in Ireland. Since 2003 the environment for entrepreneurship has changed significantly. A period of high economic growth and rising incomes ended with the onset of the current economic crisis. Since then consumer demand has contracted, business confidence has been negatively affected and the availability of finance to new and developing businesses has been restricted. At the same time unemployment has increased, resulting in a decline in inward migration and an increase in enforced emigration, particularly among young adults.

Looking back over the past ten years, in many respects it is a tale of two distinct periods - 2003 to 2008 inclusive, and 2010 to 2012 inclusive. The earlier period, 2003 to 2008, was characterized by high levels of entrepreneurial activity, with very many people perceiving opportunities to start new businesses. The media was perceived as very supportive of entrepreneurship and entrepreneurship was considered a good career option. A decline in the rate of early stage entrepreneurial activity, particularly among men, is apparent in the later period 2010 to 2012. Compared to the earlier period, 2003 to 2008, other more recent negative trends include the decline in the rate among the general population that state their intention to set up a new business in the following three years, the decline in the perception of entrepreneurship as a good career option, and a rise in entrepreneurship motivated by necessity. However, during the more recent period successful entrepreneurs continue to be held in high regard and a significant minority of all entrepreneurs has high levels of perceived innovation, intended internationalisation and expected significant growth.

The paragraphs that follow give a ten year perspective on rates of entrepreneurial activity, on aspects of context, culture and motivation, and on the economic impact of entrepreneurs. Table 2 through to Table 4 are relevant to this section and are referenced in the text.

#### 3.2 RATES OF ENTREPRENEURIAL ACTIVITY

Table 2 overleaf illustrates entrepreneurial activity over the ten year period.

**Aspiring entrepreneurs:** Each of the years 2003 to 2008 inclusive showed higher levels in the rate at which people in Ireland were stating their intention to set up a new business within three years, compared to each of the years 2010 to 2012 inclusive. (Averages of 11% compared to 8.3%)

**Nascent entrepreneurs:** The rate at which people in Ireland were actively planning new businesses remained broadly similar across the two periods, averaging 4.5% in the earlier period, compared to 4.2% in the later period.

**New business owners:** The rate at which people in Ireland were setting up new businesses in the earlier period averaged 3.9% compared to 2.6% in the later period. Moreover, in each of the years of the 2003 to 2008 period, except one (2006), the rate was higher than it was in any of the three later years (2010 to 2012).

**Total early stage entrepreneurs:** In each year of the earlier period the rate of total early stage entrepreneurial activity was higher than in the later period, averaging 8.1% compared to 6.7%.

<sup>23</sup> Due to budgetary constraints on the part of its sponsors, Ireland did not participate in the GEM 2009 research cycle.

TABLE 2: ENTREPRENEURSHIP IN IRELAND, 2003 TO 2012

Year	Aspiring entrepreneurs Percentage in adult population	Nascent entrepreneurs Percentage in adult population	New business owners Percentage in adult population	Early stage entrepreneurs (TEA) <sup>25</sup> Percentage in adult population	Men: early stage entrepreneurs Percentage in adult population	Women: early stage entrepreneurs Percentage in adult population	Ratio of men to women	Owner managers of established businesses Percentage in adult population	Entrepreneurs discontinuing businesses <sup>26</sup> Percentage in adult population
2012	8.0%	3.9%	2.3%	6.1%	8.3%	4.0%	2.1:1	8.3%	1.2%
2011	8.5%	4.3%	3.1%	7.3%	10.3%	4.2%	2.5:1	8.0%	2.8%
2010	8.4%	4.4%	2.5%	6.8%	9.5%	3.9%	2.4:1	8.6%	1.2%
2009	-	-	-	-	-	-	-	-	-
2008	10.0%	3.3%	4.3%	7.6%	11.2%	4.0%	2.8:1	9.0%	1.8%
2007	11.2%	4.2%	4.2%	8.2%	10.6%	5.9%	1.8:1	9.0%	1.9%
2006	9.8%	4.5%	2.9%	7.4%	10.5%	4.2%	2.5:1	7.8%	1.8%
2005	12.6%	5.7%	4.7%	9.8%	14.2%	5.5%	2.6:1	8.1%	2.3%
2004	11.0%	4.4%	3.6%	7.7%	10.4%	5.0%	2.1:1	6.5%	1.3%
2003	11.3%	5.1%	3.8%	8.1%	12.5%	3.7%	3.4:1	6.7%	2.5%

<sup>25</sup> In some instances, this rate is less than the combined totals for nascent and new business owners. This is because, in circumstances where respondents qualify as both a nascent and a new firm entrepreneur, they are counted only once.

<sup>26</sup> Closed a business in the previous 12 months and the business was discontinued.

TABLE 3: PERSONAL CONTEXT AND PERCEPTIONS OF GENERAL POPULATION, 2003 TO 2012

Year	PERSONAL CONTEXT			CULTURE			
	Know a recent entrepreneur Percentage in adult population	Opportunities in local area Percentage in adult population	Skill & knowledge to start-up Percentage in adult population	Fear of failure prevent start-up Percentage in adult population	Entrepreneurship is a good career choice Percentage in adult population	Success at entrepreneurship has high status Percentage in adult population	Supportive media coverage of entrepreneurs Percentage in adult population
2012	37%	26%	45%	41%	45%	81%	61%
2011	39%	26%	46%	41%	46%	83%	56%
2010	35%	23%	49%	39%	52%	81%	61%
2009	-	-	-	-	-	-	-
2008	37%	27%	48%	38%	55%	80%	65%
2007	39%	46%	49%	37%	63%	83%	68%
2006	39%	44%	51%	35%	70%	82%	84%
2005	43%	52%	50%	38%	69%	79%	83%
2004	41%	45%	48%	39%	66%	85%	77%
2003	43%	33%	46%	41%	66%	76%	84%

**Sector focus:** Between 2003 and 2006 inclusive, there was more or less an even distribution in the focus of early stage entrepreneurs across transformative, business services and consumer services sectors. In 2007 the focus on the transformative sector fell sharply (to 21%), as the focus on consumer services increased (up to 44%). This trend has continued with the consumer services sector continuing to be the most dominant (41% in 2012).

**Gender:** The level of entrepreneurial activity by men has considerably reduced over the ten year period. A significant reduction was noted in 2010 over the 2008 levels and in 2012 the lowest rate was recorded in the ten year period (8.3% compared to a high of 14.2% in 2005). The rate at which women have been engaged in entrepreneurial activity has shown a much smaller reduction than is the case with men. The rate of early stage entrepreneurial activity among women averaged 4.7% in the earlier period (2003 to 2008 inclusive) and 4% in the more recent period (2010 to 2012 inclusive). As a result the ratio of activity between men and women entrepreneurs over the decade has been more a factor of the relative buoyancy in the rate among men than it has been any change in the entrepreneurial activity rate among women.

**Owner managers of established businesses:** The rate of owner managers of established businesses in Ireland did not follow the trend observed above for early stage entrepreneurs. The rate of owner managers of established businesses in the most recent period was, on average, 8.3%, while for the earlier period the rate was on average 7.8%.

**Entrepreneurs closing businesses:** The rate at which entrepreneurs were exiting and closing businesses reached a peak in 2011, but in general the rates in the earlier period (1.9% average) are broadly similar to the rates in the later period (1.7% average).

### 3.3 CONTEXT, CULTURE AND MOTIVATIONS

The GEM study provides indicators of factors that may influence the level of entrepreneurial activity. Specifically it provides data on the personal context of the population, attitudes and perceptions of entrepreneurship (culture) and motivations of entrepreneurs. This section tracks changes in these areas over the ten year period (Table 3, previous page).

**Personal context:** The factor which shows the greatest variation over the ten year period is the perception of opportunities. In 2008 this declined to 27% from 46% the previous year. This decline was the most marked in Ireland compared to all other countries involved in GEM at the time and was highlighted in the GEM Global Report as exceptional and a precursor of the economic collapse. The other factors of knowing a recent entrepreneur, personal perception of possession of relevant knowledge and skills, and fear of failure as a deterrent have remained broadly constant over the decade.

**Pervading culture:** Successful entrepreneurs have continued to be held in high esteem throughout the ten year period. The perception of entrepreneurship as a good career choice has steadily declined, however. Moreover, the general perception that the media provides supportive coverage of the activities of entrepreneurs showed a significant decline in 2007 (68% from 84% the previous year) and has not returned to the earlier very high levels.

**Motivation:** Responding to a perceived opportunity has remained the dominant motivational factor cited by early stage entrepreneurs throughout the ten year period. The increase in the rate at which necessity was cited as the principal motivator, however, has increased steadily from 6% in 2007 to 19% in 2008 and 32% in 2010. It has declined slightly from this peak more recently, but necessity motives are still at levels not seen in the earlier part of the decade (28%).

### 3.4 IMPACT OF ENTREPRENEURIAL ACTIVITY

The majority of entrepreneurs are setting up new businesses that are in low technology sectors, are not particularly innovative and have little or no aspiration for growth. A small number of new

<sup>24</sup> The transformative sector includes both manufacturing and construction activities.

businesses, however, will have a disproportionate economic impact due to their ability to exploit newer technologies, their high degree of innovation, their greater export orientation and their aspirations for growth. The paragraphs that follow track the relevant trends in respect to each of these factors over the past ten years. For the duration of this period there is a small minority of firms each year that are characterised as innovative and that expect to be international and to have high growth (Table 4).

**Innovation:** GEM measures innovation in terms of three factors: relative familiarity/degree of novelty of the product or service to the customer; the newness of the technology used by the business; and the extent of competition, with many competitors suggesting a mature or crowded market.

On the most innovative measure in two of these three categories, a higher percentage of early stage entrepreneurs were more innovative in recent years (2010 to 2012) than previously (2003 to 2008) in terms of the degree of novelty of their products or services and the relative lack of competitors. The use of the latest technology is lower in more recent years.

**Internationalisation aspirations:** In the years 2005 to 2007 inclusive, there was an exclusive focus on the Irish market by almost half or more of all early stage entrepreneurs. Since 2008 this has reduced to approximately one in three (averaging 37% in 2008 to 2012).

Nearly one in four (23%) early stage entrepreneurs have, or expect to have, at least twenty five percent of their customers in overseas markets. This has remained largely constant over the period 2005 to 2012.

**Growth expectations:** An important impact of entrepreneurial activity is job creation. GEM takes the entrepreneurs' estimate of expected employment numbers over a defined period as a proxy to measure their growth aspirations. For the period 2003 to 2012, on average one in four (24%) of early stage entrepreneurs expect to be self-employed and to have no employees. As is common in other countries, the majority of early stage entrepreneurs in Ireland do not expect to become significant employers and this is evident throughout the decade. However, over the past ten years in Ireland an average of one in three (34%) have expected to employ at least five staff within five years of start-up.

**TABLE 4: IMPACT OF EARLY STAGE ENTREPRENEURS, 2003 TO 2012**

Year	INNOVATIVENESS			INTERNATIONALISATION		GROWTH EXPECTATIONS	
	Product/service is new to all customers	New business has no competitors	Business uses the very latest technology (less than 1 year)	No customer outside country	At least 25% of customers outside country	Any jobs now or any jobs expected in 5 years	Expect to employ at least five within 5 years
	Percentage of all early stage entrepreneurs	Percentage of all early stage entrepreneurs	Percentage of all early stage entrepreneurs	Percentage of all early stage entrepreneurs	Percentage of all early stage entrepreneurs	Percentage of all early stage entrepreneurs	Percentage of all early stage entrepreneurs
2012	23%	20%	8%	34%	28%	73%	33%
2011	16%	12%	6%	40%	24%	71%	40%
2010	21%	18%	7%	36%	23%	77%	33%
2009	-	-	-	-	-	-	-
2008	11%	12%	6%	36%	27%	82%	40%
2007	8%	12%	7%	46%	22%	71%	27%
2006	13%	10%	5%	56%	20%	75%	33%
2005	14%	15%	13%	57%	17%	76%	29%
2004	17%	14%	12%	n/a	n/a	76%	39%
2003	17%	19%	14%	n/a	n/a	80%	34%



## SECTION 4

### DERIVING THE BENEFITS OF ENTREPRENEURSHIP

#### 4.1 FOCUS BY POLICY MAKERS ON ENTREPRENEURSHIP

Policy makers in Ireland and in Europe are very clear about the benefits that can flow from a dynamic entrepreneurial economy. These relate to growth, employment creation, competitiveness and innovation. The policy makers are committed to making Ireland and the wider European community more entrepreneurial.

The second Action Plan for Jobs, published by the Irish Government in February 2013, continued the focus of the original 2012 Action Plan with regard to *Driving Entrepreneurship and Start-Up Companies*. The Government stated its commitment to focus on start-ups, recognising their crucial role to stimulating job creation, increasing competitiveness, innovation and dynamism in Ireland's enterprise base.<sup>27</sup>

These sentiments are similar to those in the Entrepreneurship 2020 Action Plan, published by the European Commission. In the EU Action Plan, entrepreneurship is seen as a powerful driver of economic growth and job creation, creating new companies and jobs, opening up new markets and nurturing new skills and capabilities. Its role in making economies more competitive and innovative is considered crucial. *To bring Europe back to growth and higher levels of employment, Europe needs more entrepreneurs.*<sup>28</sup>

The focus of the policy makers is twofold:

- (i) To increase the number of new businesses being started and the need to have broad based policies in place to encourage a greater level of entrepreneurial activity, not only more generally but in respect of less entrepreneurial groups within the population; and
- (ii) To maximize the number of the new businesses that subsequently grow to a considerable size, as research has shown that the economic benefits of enterprises that grow are disproportionately greater.<sup>29</sup>

Reflecting the first point Richard Bruton, TD Minister for Jobs, Enterprise and Innovation writing in the Foreword to the 2011 GEM report stated: *Given the impact which entrepreneurs can make in terms of employment creation, innovation and productivity, it is clear that we need to harness the entrepreneurial potential of all our people, men and women, regardless of age, whether they were born in Ireland or elsewhere.*<sup>30</sup>

Similarly, the EU 2020 Entrepreneurship Action Plan is committed to *ensuring that being an entrepreneur is an attractive prospect for Europeans.*<sup>31</sup> It also recognises that certain demographic groups are underrepresented within the entrepreneurial population and is specifically reaching out to women, seniors, migrants, the unemployed and young people.<sup>32</sup>

<sup>27</sup> Action Plan for Jobs, 2013, February 2013, Section 7, Page 86. <http://www.djei.ie/publications/2013APJ.pdf>

<sup>28</sup> Entrepreneurship 2020 Action Plan, Reigniting the entrepreneurial spirit in Europe, communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, January, 2013, Pages 3 and 4. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0795:FIN:EN:PDF>

<sup>29</sup> High-growth enterprises are firms that by their extraordinary growth make the largest contribution to net job creation, despite typically representing a small proportion of the business population. With their presence in the economy considered promising for the creation of more jobs and innovation, interest in high-growth firms is high among policy makers, "High Growth Enterprises Rate" in Entrepreneurship at a Glance 2011, OECD Publishing (2011). [http://www.oecd-ilibrary.org/industry-and-services/entrepreneurship-at-a-glance-2010\\_9789264097711-en](http://www.oecd-ilibrary.org/industry-and-services/entrepreneurship-at-a-glance-2010_9789264097711-en)

<sup>30</sup> The 2011 GEM Report for Ireland is available for download <http://www.forfas.ie/media/24092012-GEM%202011-Publication.pdf>

<sup>31</sup> Entrepreneurship 2020 Action Plan, 2013, Section 1, Page 5.

<sup>32</sup> Entrepreneurship 2020 Action Plan, 2013, Section 4.2, Page 22.



In order to garner the maximum economic impact from entrepreneurship and to reap the benefits identified by policy makers in Ireland and Europe, it is important that there are not only a high number of entrepreneurs but that the maximum number of enterprises are innovative, with an intention to internationalise and with a clear aspiration for significant growth. The EU notes with regret that when new enterprises are founded, they grow more slowly in the EU than in the US or emerging countries and fewer of them join the ranks for the world's largest firms.<sup>33</sup>

## 4.2 THE CONTRIBUTION OF THOSE STARTING NEW BUSINESSES

In achieving the stated policy goals, the differences between entrepreneurs who are starting new businesses and those who are the owner managers of longer established businesses is very pertinent. As noted in previous GEM reports there is evidence from the GEM data that early stage entrepreneurs differ considerably from owner managers of established businesses. Entrepreneurs in Ireland who are starting new businesses, when compared to owner managers of established businesses, tend to be more innovative, aspire to create more employment and to be more export oriented. These are important differences and underpin the very important role that those setting up new businesses play in driving job creation, innovation and exports.

While minor variations may be observed year on year, the underlying differences between early stage entrepreneurs and owner managers of existing businesses remain constant. These differences are summarised in Table 5. International comparisons are provided in Table P through to Table V in Section 7. Table 5 highlights:

- **Differences in growth aspirations and expected employment creation:** It is clear that a far greater proportion of early stage entrepreneurs expect to create ten or more jobs within five years (26%) than is the case among owner managers of longer established businesses (5%).
- **Differences in market focus:** The Irish market is more important to owner managers of established businesses, almost half of whom (46%) have no customers outside the country compared to the aspirations and activity of entrepreneurs who have started businesses more recently (36%).
- **Differences in degree of innovativeness:** A higher proportion of early stage entrepreneurs may be classed as highly innovative compared to owner managers of established businesses. The products or services of the latter have less claim of novelty, have many competitors and use established technology to a much greater degree than is the case with those starting businesses more recently.
- **Differences in technology intensity:** High or medium technology sectors are of greater importance to those starting new businesses than they are to owner managers of longer established businesses (9% compared with 6%).

**TABLE 5: COMPARISON OF EARLY STAGE ENTREPRENEURS AND ESTABLISHED OWNER MANAGERS**

	Early Stage Entrepreneurs	Owner managers of established businesses
<b>Growth Aspirations</b>		
Expect 10 or more jobs within 5 years	26%	5%
<b>Focus on International Markets</b>		
Some customers outside country	64%	54%
<b>Innovativeness</b>		
Product/service is new to all customers	23%	5%
Business has no competitors	20%	5%
Business uses very latest technology (less than 1 year)	8%	2%
<b>Technology Intensity</b>		
High or medium technology sectors	9%	6%

<sup>33</sup> Entrepreneurship 2020 Action Plan, 2013, Section 1, Page 4.

## SECTION 5

### A GENDER PERSPECTIVE

#### 5.1 INTRODUCTION

The EU Commission in its recently published 2020 Entrepreneurship Action Plan recognises that women “represent a large pool of entrepreneurial potential in Europe,” as women represent over half of the European population (52%) but only one third of the self-employed or of all business starters in the EU.

The EU considers that when establishing and running a business, women face more difficulties than men, mainly in access to finance, training, networking, and in reconciling business and family and advocates that paths into entrepreneurship should be created for them, empowering them economically and socially and leveraging their creative and innovative capacities.

The 2012 GEM research for Ireland indicates that the level of women’s entrepreneurial activity has remained steady at the same time as their expectations for the growth of their businesses have increased very significantly. This reflects the increased spotlighting among policy makers and development agencies among others to encourage more women to become more involved in entrepreneurial activity and to be more ambitious for their new businesses. Entrepreneurial activity among men, on the other hand, has declined significantly and there is a decided lowering of their expectations for the growth of their new businesses. This is a matter of concern. For ease of reference, the cross country tables relevant to this section (Table W and Table X) are in Section 7.

#### 5.2 MALE AND FEMALE ENTREPRENEURS IN IRELAND

Like other European countries Ireland has a much higher proportion of men compared to women engaged in entrepreneurial activity, with men more than twice as likely as women to be entrepreneurs. While this continues to be true in Ireland in 2012, what is particularly significant is the sharp decline in the rate at which men are early stage entrepreneurs. The rate among women has remained more consistent (Table 6).

**TABLE 6: EARLY STAGE ENTREPRENEURS AND ESTABLISHED OWNER MANAGERS BY GENDER**

Year	Men: early stage entrepreneurs	Women: early stage entrepreneurs	Men:Women (early stage entrepreneurs)	Men: established owner managers	Women: established owner managers	Men:Women (established owner managers)
	Percentage of adult population	Percentage of adult population	Rate as a ratio	Percentage of adult population	Percentage of adult population	Rate as a ratio
2012	8.3%	4.0%	2.1:1	11.8%	4.7%	2.5:1
2011	10.3%	4.2%	2.5:1	10.9%	5.0%	2.2:1

#### EARLY STAGE ENTREPRENEURS

The rate at which early stage entrepreneurs were to be found among the adult male population in Ireland in 2012 (8.3%) is the lowest rate recorded for men in Ireland in the last decade. Across the OECD and EU-27 men are more likely to be early stage entrepreneurs than they are in Ireland. The rate of 8.3% for men in Ireland compares with 10.7% across the OECD and 10.4% across the EU-27. The rate for men in Ireland is now more on a par with the EU-15 (8.6%).

Similarly the rates at which women are likely to be early stage entrepreneurs is higher across the OECD (5.8%) and EU-27 (5.2%) than it is in Ireland (4.0%). The rate in Ireland is more on a par with the EU-15 (4.6%).

In 2012, the ratio of men to women early stage entrepreneurs in Ireland narrowed considerably to 2.1 from 2.5 in 2011 (Table 6). The narrowing in the entrepreneurial gender divide in Ireland noted in 2012, however, was not brought about by a higher proportion of women starting new businesses, but rather by a decline in the rate at which men were starting new businesses.

Even with the narrowing in Ireland of the ratio of men to women early stage entrepreneurs, the ratio is still wider in Ireland (2.1:1) than is the case in the United States (1.5:1), in the United Kingdom (1.8:1) or more generally across the OECD (1.8:1) (Table W).

## OWNER MANAGERS OF ESTABLISHED BUSINESSES

The rate at which owner managers of established businesses are to be found among the adult population in Ireland is relatively high (8.3%) and much higher than is the case across the OECD (6.7%), EU-27 (6.6%) and EU-15 (6.6%). The rate is more on a par to that prevalent in the United States (8.6%).

In Ireland the rate of women who are owner managers of established business (4.7%) is in or about that prevailing across the OECD (4.2%), EU-27 (4.0%) and EU-15 (4.1%). It is the much higher prevalence of men in Ireland as owner managers of established businesses (11.8%), compared to the averages across the OECD (9.3%), EU-27 (9.3%) and EU-15 (9.0%), that accounts for the higher rate of owner managers in this country (Table W).

## 5.3 PERSONAL CONTEXT

Potential entrepreneurs are found among men and women in the general population and are *latent entrepreneurs*. They may never act on their entrepreneurial potential but they have certain aspects in their personal context which make them more likely to be future entrepreneurs than others in the population. They tend to be alert to opportunities in their environment, believe that they have the knowledge and skills to successfully start and run new businesses, are less susceptible to be inhibited by fear of failure and have entrepreneurial role models. As is the case internationally, men in Ireland continue to possess these characteristics to a much greater extent than do women (Table X).

**The perception of opportunities to start a new venture** among the general population in Ireland declined significantly in 2008 compared to 2007. This was true for both men and women. In 2012 there was no real indication of a return to the earlier higher levels, as the rates for both men (28%) and women (23%) were exactly the same as in the previous year. These levels are considerably lower than is the case across the OECD, EU-27 and EU-15.

**The prevalence of self-confidence** in own skills to successfully start and manage a business is similar to international averages and has held relatively steady over the years for both men (54%) and women (36%) in Ireland. As was noted in the 2011 GEM report, the higher rate of self confidence among men follows the trend internationally, including across the Nordic countries and in the United States.

**Fear of failure** as a deterrent inhibiting a start-up is more prevalent among women (46%) than it is among men (37%) in Ireland and continues at levels similar to those observed in 2011. A similar trend can be observed across the OECD, EU-27 and EU-15 with a lower proportion of men reporting that their entrepreneurial behaviour would be negatively affected by fear of failure than is the case for women.

**Entrepreneurial role models:** Typically higher levels of men (44%) than women (31%) in Ireland report knowing someone who has recently become an entrepreneur. These rates are broadly similar to those prevalent in 2011. Once again the rate for men is higher than is the average observed across the OECD, EU-27 and EU-15; while the rate for women is close to the average across the OECD, EU-27 and EU-15.

## 5.4 CHARACTERISTICS OF EARLY STAGE ENTREPRENEURS BY GENDER

On average men and women are starting businesses in their late thirties (mean 38.5 years). There is no indication that women are deferring the start of their new businesses until after their child bearing years.

Compared to other countries, those in the early stages of starting a new business in Ireland tend to have a much higher level of education, with 73% being educated beyond secondary school. This is true for both men and women (72.5% and 80% respectively) (Table 7).

## 5.5 NEW BUSINESSES BEING STARTED BY GENDER

There is a distinctive difference in the types of businesses being started by men and women entrepreneurs in Ireland. The dominant focus for men is business services (41%) and consumer services for women (57%) (Table 7). These same differences were observed in 2011, with business services the most popular sector of activity for men setting up new businesses (34%) and consumer services representing the majority of women's new businesses (51%). As is apparent this focus of activity has become even more pronounced for both men and women in 2012.

## 5.6 IMPACT OF ENTREPRENEURIAL ACTIVITY BY GENDER

The economic impact of entrepreneurial activity is underpinned by the creation of employment and increased export sales. In 2012 the majority of those starting a new business expect to have at least some exports (66%). This is the case for both men (69%) and women (59%) (Table 7). This indicates a higher proportion of early stage entrepreneurs who expect to become exporters than in 2011, and the increase is particularly marked among women (49% to 59%).

**TABLE 7: COMPARISON OF EARLY STAGE ENTREPRENEURS BY GENDER**

	<b>MEN</b> Percentage of all male early stage entrepreneurs	<b>WOMEN</b> Percentage of all female early stage entrepreneurs
<b>EDUCATION</b>		
Primary and/or some secondary	8.5%	3%
Secondary school	19%	17%
Post-secondary	59.5%	44%
Graduate education	13%	36%
<b>SECTOR OF ACTIVITY</b>		
Extractive	5%	5%
Transforming	21%	16%
Business Services	41%	22%
Consumer Orientated	33%	57%
<b>CUSTOMERS IN OVERSEAS MARKETS</b>		
None	31%	41%
1% to 24%	39%	35%
25% to 74%	14%	16%
75% to 100%	16%	8%
<b>GROWTH EXPECTATIONS</b>		
At least 10 jobs within 5 years	27%	23%
At least 20 jobs within 5 years	16%	15%

The growth aspirations of entrepreneurs setting up new businesses in Ireland compares very favourably with international averages. Year on year it had been observed, however, that men in Ireland had much higher expectations for their new businesses than had women. This was seen to further exacerbate the entrepreneurial gender divide. In 2012, however, a marked narrowing of this divide is observed, with women for the first time significantly increasing their stated employment expectations for their new businesses. At the same time a reduction in the growth expectations of male entrepreneurs for their new businesses was apparent (Table 8).

The increase in the ambition of women entrepreneurs is to be welcomed and reflects efforts in recent years to encourage women to have higher ambitions for their new businesses. The reduction in the expected growth of new businesses started by men is a cause for concern, however, particularly as it comes at a time of lower rates of early stage entrepreneurial activity by men.

**TABLE 8: GROWTH ASPIRATIONS OF EARLY STAGE ENTREPRENEURS BY GENDER, 2011 AND 2012**

	2011 Percentage of all early stage entrepreneurs	2012 Percentage of all early stage entrepreneurs
<i>Expect to have at least 10 jobs within five years</i>		
For men early stage entrepreneurs	36%	27%
For women early stage entrepreneurs	12%	23%
For all early stage entrepreneurs	29%	26%
<i>Expect to have at least 20 jobs within five years</i>		
For men early stage entrepreneurs	24%	16%
For women early stage entrepreneurs	6%	15%
For all early stage entrepreneurs	20%	15%

## SECTION 6

### UPDATED PROFILES OF ENTREPRENEURS FIRST FEATURED IN GEM 2005

Entrepreneurs are people not statistics! This may appear self-evident, but in a report which examines entrepreneurship in terms of numbers and statistics, this is an important point to make.

This is the reason that in 2005 we first introduced profiles of recent entrepreneurs. Each of these men and women, who were from different parts of the country, had set up a new business between 2002 and 2005.

In a report which contains a ten year perspective on entrepreneurial activity in Ireland, we thought that it would be a good idea to re-contact several of the entrepreneurs who were featured in 2005, and see what had happened to them in the meantime. These entrepreneurs come from a variety of backgrounds and have set up a range of different types of businesses. What unites them is an ability to spot an opportunity and the persistence and resourcefulness to turn that idea into a new business venture.

All interviewed agree that setting up a business is very challenging and that the hard work and commitment involved should not be underestimated. As Jan Berg says, *it is important to be persistent, as the challenges will inevitably come and you have to keep focused, despite the knocks*. Michael O'Shea is also clear about the commitment involved. *Without committing 100% to the business, it is never going to get going*.

Elaine Coughlan cautions that entrepreneurship is not easy and is not for everyone. The difficulties and risk involved is not for the faint hearted as Monica Nugent testifies. *As a self-employed person I have no safety net. Being an entrepreneur turned out to be a lot more difficult than I thought....and it has not got any easier over the years*.

The entrepreneurs were very grateful for the support they received along the way, both from family and from other sources. John O'Hare is particularly complimentary of Enterprise Ireland's support, while Deirdre Uí Chathmhaoil suggests that entrepreneurs should seek advice from their local Enterprise Board or Údaras na Gaeltachta and anyone they know in the market. *Make sure to draw down any grants that are available to you*, she advises.

The entrepreneurs interviewed have advice for those thinking of setting up a new business. David Walsh emphasises the need to have a clear vision and strategy for the business. *It is vital for any entrepreneur or business owner to have clarity of purpose and to define your place in the market in which you are operating*. For Elaine Coughlan *the starting point remains a defensible idea and business model and then you need great people*.

While cautioning about nay-sayers and those who will knock any good ideas, David Walsh recognises the need for entrepreneurs to have self-confidence in their new enterprise. *If we all looked at the negatives of starting a business, there would be a severe shortage of entrepreneurs in the world. Sometimes, you just have to take a calculated risk*.

Sean Fitzgerald agrees that too much analysis can lead to paralysis of action. *My advice to those thinking starting a business is don't think about it too much. It won't withstand too much rigorous analysis. Just do it...take the first step!*

The pages which follow contain updated profiles on eight entrepreneurs, who started businesses in Ireland when the environment was quite different to what it is today. The entrepreneurs featured are as follows:

- Jan Berg
- Elaine Coughlan
- Sean Fitzgerald
- Monica Nugent
- John O'Hare
- Michael O'Shea
- Deirdre Uí Chathmhaoil
- David Walsh



## JAN BERG

Drawing on nearly 30 years' experience of international shipping, oil and energy businesses, Jan Berg, a native of Norway, identified a commercial opportunity for the development and growth of the shipping industry in Ireland, as part of his MBA thesis. Having completed his MBA, Jan followed through and established Maritime Management in 2002, an ISM-certified ship management & maritime services company.

Ten years later, Maritime Management maintains its core business of shipping management, marine technical and financial consultancy, naval architecture and maritime surveying. The company has expanded its operations and now employs ten in the office and about 100 sailors. The business has moved from its original site of NovaUCD and is now located in Greystones, Co. Wicklow. The choice of Greystones as a location for the office was one of convenience. *We had to move out of UCD after a few years and as company staff were already living out here, it was an easy decision.*

Maritime Management has become one of the few Irish companies to be ISO 9001 and ISO 14001 accredited by Germanischer Lloyd. The ISO 9001 award means that Maritime Management operates a quality management system that involves providing their customers with products that meet their expectations. The ISO 14001 accreditation was awarded because of the company's strong environmental ethic and their ability to provide services with minimal impact on the environment. The ISO 14001 is an industry standard accreditation not often seen in Ireland. As it is offered by Maritime Management's international competition, it was imperative that Maritime Management could also offer this standard.

Maritime Management has had high profile foreign clients over the years, such as the American explorer Dr Bob Ballard, who discovered The Titanic and The Bismarck. Jan Berg and his team were responsible for the conversion of his ship, the EV Nautilus, into a 'hyper-modern' scientific exploration vessel. The company is now responsible for managing the ship. *If you watch Discovery Channel there is a good chance you will see a programme from the ship studying hydrothermal vents or Phoenician war ships from 2000 BC.*

Over the years Maritime Management has facilitated a number of ship-owners and many ships to have a base in Ireland. *We have operated luxurious passenger ships, offshore vessels, reefers and bulkers. Our projects range from floating hotels to port studies.* Notably Maritime Management also uses locally sourced services for spares, insurance, banking and finance. Hence the positive benefits for the Irish economy go far beyond the company.

Maritime Management remains the only business of its kind in Ireland. Accordingly, many of the challenges the company currently faces are the same as when it was set up. *Due to the industry being so small it is difficult to build up synergies with other local maritime companies. We're missing the cluster effects that other countries are able to take advantage of.* Despite these disadvantages, Jan is adamant that the company will remain in Ireland.

Jan is working on the *Irish Sea Marine Cluster* as a side project. He is collating a list of people and firms who deal with the maritime trade and intends providing a platform to facilitate cooperation among local firms ([www.maritime-cluster.com](http://www.maritime-cluster.com)). *I decided to compile it as the numbers have grown over the years and I want to be able to identify everyone involved in a very fragmented market. It will be a tool for the outside world to easily find Irish marine service providers. Should large jobs opportunity come, local firms and individuals can find partners to cooperate with subcontractors. Listing is free. Together we stand stronger.*

Jan admits that building the business has taken a lot of hard work, but he would do it all again. He cautions anyone thinking of starting their own business to be prepared to work hard. *It is important to be persistent, as the challenges will inevitably come and you have to keep focused, despite the knocks.* Careful management of the finances is another area that Jan highlights as he considers this vital to the business. *It is also very important to have a good support system. Finally make sure you have good guys on your team because without them the business won't grow.*

Ten years after the launch of Maritime Management, Jan Berg intends to continue to develop the company in a steady, sustainable way.



## ELAINE COUGHLAN



When Elaine Coughlan was first profiled in the 2005 GEM report she had just set up Atlantic Bridge with co-founders Brian Long and Kevin Dillon. All had been involved in building global businesses which resulted in successful M&A sales and IPOs on NASDAQ. They wished to leverage their accumulated knowledge and experience not just on behalf of one company, but on behalf of many.

The guiding philosophy for Atlantic Bridge has remained the same since its establishment. It is characterised by an entrepreneurial style, with a hands on approach to a focused number of selected investments in key domains. The founders commit their own money, as well as managing the capital of other investors. As Elaine explains *the significant commitment of the founding team gave us a paced and disciplined approach to investment. We were entrepreneurs with capital and not just managers of other people's money. That was what differentiated us.*

Starting out in 2004 with an investment of €7 million under management, Atlantic Bridge has grown in scale to total assets under management of €172 million. *We realised that by moving beyond the role of individual angel investors, and by building networks and investment partners in Europe, the US, and Asia, we could accomplish much more than we could have done as three individuals. The wealth of experience and extensive industry contacts that we have been able to build up adds value in the companies we invest in, above and beyond a purely financial investment.*

Atlantic Bridge continues to be driven by the operational focus of the team and is primarily sector led, with a particular focus on cloud and mobile convergence enabling technologies. According to Elaine by 2020 the IT industry will be dominated by the new disruptive technologies of today, cloud computing, mobile devices and Apps, social technologies and big data analytics. *This represents a structural change and a new platform for growth and we believe will drive strong returns for investors,* she says.

As its name suggests Atlantic Bridge is a transatlantic model with a Pan-European and US footprint. Several of its portfolio companies have product R&D teams in Ireland and Europe with key management and sales and marketing functions in the US, close to strategic partners and customers. *Our objective is to invest locally but to expand and exit internationally. That is the Atlantic Bridge.*

Elaine believes that the strength of a company is only as good as the team that runs it, no matter what the sector. *High growth companies are built on winning teams. For our portfolio companies, we aim to hire international multi-disciplinary teams of highly talented individuals with global ambition.* Those same characteristics are to be found in Atlantic Bridge's team of general partners and investment professionals, who include Gerry Maguire, Larry Quinn, Peter McManamon and Chris Horn.

Atlantic Bridge now has offices in London and Silicon Valley, as well as Dublin. *Basically we now operate 24/7 seeking out the best proprietary deals in our target domains and work with those entrepreneurs leading investee companies in our portfolio to help them to scale and internationalise quickly through adding both capital and value add.*

*I still get an enormous buzz from working with companies with real scalable potential. Their win is our win. We are real partners in their success and work hand in glove with the companies to bring this about.*

Elaine cautions that entrepreneurship is not easy and is not for everyone. *The starting point remains a defensible idea and business model and then you need great people. The entrepreneur can lead, but the really successful ones lead a really great loyal team around them. You need patience, as it is a slow process. There are few overnight wins. There will be tough days. You need a vision of what success will look like and then the tenacity and perseverance to keep going until you make it happen.*





## SEAN FITZGERALD

Sean Fitzgerald set up Sentenial in 2003 to capitalise on an opportunity he identified when managing a European business for a large multinational. At that time there was no system of linking invoice presentment to a direct debit on a European basis. Sean set about developing a euroDEBIT flagship product platform, which would facilitate direct debit payments for corporates and financial institutions.

Sentenial has continued to develop a range of new products and services to help its customers contend with the ever changing dynamic of the financial market. The company has built upon an international demand for Single Euro Payments Area (SEPA) payment solution. Over ninety per cent of Sentenial's revenue is derived from exports. This increase in demand has also meant that Sentenial's staff has grown to around 150 people from the 20 to 30 that were employed in 2005. Head quartered in Maynooth, Sentenial now has international offices in London, Paris, Frankfurt, Brussels, and Amsterdam. Sentenial has also been the winner of 'The Banking Technology Choice Award; Best Payment Product or Service' in both 2010 and 2011. Thus cementing its reputation as a market leader.

Starting and growing a company as Sean has done is not without its challenges. *It's now a very different environment to what it was in 2005. It has been affected by the financial crisis and the subsequent effects on the euro. We continuously face many challenges right across the different functions in the organisation - from marketing, sales, product and the many dimensions of operations to propelling continuous innovation.* Sean recognises that there will always be challenges and that the best approach is to prioritise them.

For Sean, the key to a company's success is in its ability to meet its long-term strategic goals. He believes that Sentenial's future was mapped out at its inception and that the goals defined then remain the same. *Our main goal is to ensure that we are the pre-eminent enabler when it comes to business service providers and payments for banks and corporates in Europe in a SaaS delivery model. We do this by focusing on our customers' needs and by constantly adding to the products and services we already have in the market.*

*Invariably other opportunities arise, but you need to be careful and make sure that you follow the original goals that you've laid out for yourself. You sometimes have to take advantage of these opportunities as they arise, especially when the market is slow, as it can be a good way to get cash flow and revenue. But the most important thing a company can do is to follow the long term strategic goals that it has set out.*

A European Union regulation relating to SEPA will become operational on the 1st of February 2014. It will apply across 32 European countries, including Ireland, and is intended to make it easier to transfer or receive funds. All banks and corporates must become SEPA compliant by this date. The obligatory nature of this requirement means that Sentenial's services are currently very much in demand. *We have secured some of the biggest deals in the market over the last 18 months. We have also dealt with some of the most prestigious banks and corporate customers and so now they are all connected to us.*

Sean feels strongly that an entrepreneurial spirit should be nurtured in young people. *Here in Ireland, there needs to be a higher risk appetite amongst young people. There is much more encouragement from at home for them to go into professions, where they'll have job security. There is a fear factor involved in pursuing a career where there is no certainty of a pension or a job. We need to do something to combat this mind-set.*

Sean has some advice to those thinking of setting up their own business. *Probably, don't think about it too much. It won't withstand too much rigorous analysis. Just do it...take the first step!* He cautions, however, about expecting fast returns. *Setting up a company, selling and making a big exit in a short amount of time is a rare event. You must be prepared to think long term. Have a strong idea that you will commit to. One of the most important things you will need is a good support system behind you. You cannot do it by yourself.*

## MONICA NUGENT



Monica Nugent, having spent her formative years in Australia and Argentina, found herself in Donegal having met and married an Irish man in Argentina. Unable to find work in the county to match her qualifications and experience in the IT sector, Monica set up MPN Computer Services in 2003 and re-launched the business in 2005 on a nationwide basis under a new name - Ireland's PC Doctor.

Ireland's PC Doctor intended to provide a range of services such as repairs, maintenance, sales, networking, web site design, live telephone technical support and live remote access support. Some of these proved more difficult to implement than had originally been thought. For example one idea was a hotline where the customer could have direct access to Monica for a premium phone-line charge. *We advertised the hotline nationally, but it just did not take off in the way we had hoped it would.*

Monica built up a steady local business, even if it did not get the national reach she had initially hoped for. At the start of the recession the business did not appear to be affected by the downturn. *While other companies were being forced to close down and more and more people were finding themselves unemployed, Ireland's PC Doctor appeared to be unaffected. Then in 2011 everything changed. It became like day and night and I was hit very badly.*

The downturn in business and revenue meant that Monica had to reassess the business and come up with a new business model to cope with the economic environment. Monica moved the business into a retail unit in Donegal Shopping Centre and it went from being an onsite services provider to a retail one. *I kept on about two or three contracts that I already had but I had to give up any of the ones that would take up too much of my time, as I now had to be in the shop.* Monica was optimistic about the change in the business mode of operation.

In deciding to set up a shop Monica planned to offer a repair service in the shop and also to sell computers, laptops, tablets and accessories. Monica encountered many challenges in setting up the shop, the main one being cashflow: *There are enormous costs involved in setting up a retail store. At first you have to buy in order to fully stock the shop. This depletes your cash flow and it takes a while before you start to begin to see a revenue return.*

Another challenge was from the grey economy. Monica finds that a consequence of the recession is that there are many unemployed people who are trying to make extra money by doing amateur computer repair jobs for friends and neighbours. *Many of these guys have worked with computers and so they offer to repair their neighbours' computers for some extra income but the majority of the time they are out of their depth. This means that I often get calls to go out and fix the disasters that have been created by people trying to help.* The increase in these amateur repair men meant that practically overnight Monica lost her home based clients.

Monica is looking for new ways to survive and thrive. She is currently in the advanced stages of developing a new online store to sell electronic products. This will be up and running in the next few months. This development is a natural fit with the shop.

Monica believes that as someone who is self-employed she has been failed by the Government. *As a self-employed person I have no safety net and the worst part about it is that my husband is also self-employed.* Monica admits that she would think twice about being self-employed if she had to make the choice again and would probably choose the security of employment.

In 2005 Monica pulled no punches about how difficult it was to set up a new business: *Being an entrepreneur turned out to be a lot more difficult than I thought....and it has not got any easier over the years.*



## JOHN O'HARE

When John O'Hare was first profiled in the 2005 GEM report, he had just sold his first business and was in the early days of setting up another.

John had set up Amocom Net in 2002 as an Internet Service Provider (ISP). When setting up the network, he found that while there was excellent radio equipment available from a number of vendors, a comprehensive management system didn't exist. As a consequence, Amocom started to develop software internally to help run its network.

After a few years, it became clear that other ISPs had the same need as Amocom had – for a comprehensive, reliable and robust management system. John explains: *In 2005 we sold our network business, and focused on further developing the SIMPLer platform through a new company, Azotel Technologies.*

Azotel equips broadband operators with the technology and automated business processes required to build out commercially successful and highly profitable networks. Today Azotel has over hundred Azotel Enabled Operators and works in a global environment. Azotel Enabled Operators supply broadband services to hundreds of thousands of subscribers across Europe, Africa, North America and Australia.

From 2006 through to 2008, Azotel had a strong focus on the Irish market. *We were working on a franchised system and recruited a dozen franchisees. These have now gone on to become successful businesses in their own right.*

Once Azotel had secured its place in the Irish market it began to look overseas for new operators. This presented a new set of challenges. Azotel adopted a new subscriber based platform model for the international markets. It used the software, which had been developed and perfected in the Irish market, and adapted it for the different international markets.

In 2008, Azotel won a government backed project in Nova Scotia, Canada. *The effort we put into this was rewarded with positive results. We gained recognition in North America and were approached by a distributor from Indianapolis.* This distributor provided the company with a database of existing customers in the American market. Azotel was able to utilise this database to gain 50 new operators.

Prior to entering the US market Azotel had been trading in Africa where there was less wholesale broadband. Because of this they had already integrated a usage based monitoring system, which was subsequently required for the US market. *The advantage of being in so many markets is that we can develop a best practice in one market and then apply it to all the markets we trade in.*

Azotel began with two employees and this number has now grown to eight. At the same time, the company has seen its number of worldwide operators rise to 110, all of whom provide employment within their own businesses. Azotel now has offices in Ireland, the US, Canada, South Africa, Poland, and the UK and operates in 22 countries.

John is very positive about the future of Azotel as the company is constantly adapting. Through its R&D work Azotel can provide operators with enhanced and even more efficient systems. John describes Azotel's strength as being well placed in the subscriber management niche. *Our technology could be adapted to a variety of different markets. There is no shortage of areas we could expand into if we ever got bored of what we are doing!*

John is very grateful to his team and to Enterprise Ireland who has supported him from the start of Azotel Technologies. *Enterprise Ireland has been very good in supporting us. The majority of operators we work with across the world are entrepreneurs and this is their first time in business. In this way we see close up the work of the different support agencies in the various countries. There is no competition. Ireland is very lucky to have an organisation like EI!*

For John the biggest challenge about being an entrepreneur remains the same as it was in 2005 - time. *I never have enough of it!* His greatest supporters, besides his wife Denise and son Ben, are the existing group of Azotel Enabled Operators. *Their loyalty is the best testimony for the business and augurs well for its continued success and growth.*

## MICHAEL O'SHEA

In 2005 Michael O'Shea's company Intelligent Health Systems (IHS) was researching biomedical signal analysis for diagnostic and monitoring procedures in the medical and veterinary markets in Ireland.

IHS initially focused on consulting but found that this strategy didn't work in the downturn of the economy. *We had hoped that through the consultancy we would gain the income needed for funding further research. But without the funding we were unable to do the biomedical research needed. As a result the company became static.* The company has not folded and is still in operation today, but on a much smaller scale.

IHS has become the basis for another spin-out company and Michael has been able to harness research from IHS for the product development of this new venture.

The new company is Orion Veterinary Ltd and is based in NovaUCD, where development of its product line is taking place. Orion will provide a health and fitness monitoring platform for animals. The company's technology takes medical data and wirelessly transmits it to centres for analysis. *We make sensors to monitor a range of issues, such as ECG, cardiac output and foetal heart monitoring. We can streamline this data for analysis and provide a resource to vets, researchers and trainers to aid their clinical, training or husbandry decisions.*

The company also conducts research in equine gait analysis and provides various physiological monitoring solutions. *This type of technology has been used on humans but generally is not well tolerated, due to issues with comfort and ease of movement. However with horses we have an advantage, as the size of the sensors are relatively small and are well tolerated for extended periods. One of the knock-on effects that we have seen is that some of the technology, which we have been able to explore, has potential for spin back into human research.*

Michael says that his experience from IHS and further research has allowed him to come up with a better business plan for Orion. The company is currently six to eight months away from releasing products into the market. They are using this time to perfect prototypes and finalise their market offering.

Funding has been a constant challenge. *In the very early stages of research we didn't know where to go to get funding. If we were an academic institution this would not be such a problem as we would be eligible for university funding for our research.* Orion has explored alternative methods of financing. Last year they were the recipients of support under the Competitive Start Fund from Enterprise Ireland.

An issue Michael faced with IHS in 2005 was educating people about the emerging technologies that the company was using. This still seems to be the case with Orion. *I try to take a more lateral approach which usually means that the technology that I work with is slightly ahead of what is currently available. Things that I was looking at ten years ago are only becoming mainstream now. This makes it harder to get commercial investment as potential investors often want to see the finished product and what it can do. However, I completely understand why investors take this view and my job is to put forward a sufficiently robust business case that outlines how good our offering is, the market potential and of course the strengths of the team behind it all.*

Michael is very optimistic about the future of Orion. The company has received positive feedback from both vets and trainers, who have noted the clinical and performance potential of Orion's products.

*This is the business I have most personal alignment with, given my background. I enjoy every day. Clinicians all want the products so we just have to turn this into a business model to prove to Venture Capitalists that we have a robust product portfolio that has been market tested.*

Michael does not underestimate what it takes to be an entrepreneur. *You need to factor in personal circumstances and weigh it all up as there is a lot of sacrifice involved. Without committing 100% to the business it is never going to get going. The key to a successful business is 10% inspiration and 90% hard work - and somewhere in that equation you need to factor in luck!*

Michael has set up several businesses and is currently involved with a connected health business start-up in a technical advisory capacity. *Initially I was never really comfortable with the term entrepreneur...but I suppose at this point I would fall into that category. I can't see myself doing anything else.*





## DEIRDRE UÍ CHATHMHAOIL

Deirdre Uí Chathmhaoil set up Rí Na Mara, Irish Seaweed Cosmetics, in January 2004 with her husband, Seamus. The couple spent two years, prior to the setting up of the new business, researching and developing a range of skin care products based on mineral rich extracts distilled from seaweed collected off the west coast of Ireland. A registered general nurse with extensive experience in a Dermatological Unit, Deirdre graduated in Cosmetic Science and became a member of the Society of Cosmetic Scientists. Seamus previously had experience of aquaculture. From the beginning they decided to locate Rí Na Mara in An Spidéal, Co. Galway, where the family had returned after living and working for some time in the North West of England.

Since 2005, Rí Na Mara has increased its brand awareness and customer base both at home and overseas. The company now has distributors in the US and Australian markets. Rí Na Mara now employs four fulltime members of staff and up to ten seasonal staff members. The company's products were featured on the QVC Shopping Channel in the United States. This was a great success as demand for the products was very high. This appearance also generated new visitors to the website. It is important to Rí Na Mara to build upon and grow a loyal consumer base and so they have been attending many trade shows. *We find this reminds people about our products and we also wanted to reach out to our customers.*

One of the biggest challenges that Rí Na Mara has come up against has been the identification of suitable international distributors. *It is vital to appoint distributors who are passionate about our product and want to sell it. This involves a lot of travelling to meet perspective distributors.* The global recession meant that the company has had to adapt its market strategy. *We worked on the website and brought it up to international standards. We also developed an extensive mail order system for people who do not want to go online to order. We also increased the number of trade fairs we attend and embraced social media by setting up Rí Na Mara Irish Seaweed Cosmetics Facebook to let customers know about new products and promotions.*

According to Deirdre, the most significant development for the company since 2005 has been the development and launch of its new range of organic products, *Irish Organics*. The products are 100% organic and have taken three years to develop. *There were a lot of 'hoops and loops' the products had to go through, including being fully audited.* They are now internationally certified by NATRUE (True Friends of Natural and Organic Cosmetics). The NATRUE certifiers came over from Germany to Connemara to observe the production process of the new range. This included the harvesting and cutting of the seaweed, both of which are done by hand. The certifiers also had to ensure that all the ingredients used were 100% organic. [www.irishorganics.ie](http://www.irishorganics.ie)

Almost ten years later, Deirdre does not regret starting her own business. *I've learnt so much that I'd definitely do it all again. I've enjoyed it and met so many amazing people. I'd also be a bit wiser this time around.* Her advice to anyone thinking of setting up a business is to do a feasibility study to check if there is a market for your product. *Seek advice from your local Enterprise Board/Údaras na Gaeltachta and anyone you know in the market and make sure to draw down any grants that are available to you.*

Deirdre's zeal has not diminished. *We remain passionate about skincare.* Rí Na Mara continues to be committed to ensuring that its products are made as naturally as possible. Deirdre's aim is to increase the brand and product range, including a range of products for beauticians and spas. She also hopes to strengthen their position in the global market, as exporting now accounts for a large portion of their revenue. At present Deirdre's sights are on breaking into the lucrative Middle Eastern market. *We've just attended a Trade Mission organised by Enterprise Ireland in Dubai. We are very excited about this opportunity, we met with a number of distributors and buyers interested in both Rí Na Mara and the Irish Organics Skincare range. We familiarised ourselves with registration and set about this process to enable us to sell our products in the Middle East.*





## DAVID WALSH

When profiled in 2005, David Walsh was in the early days of his new business, having set up Netwatch in 2003 with his business partner Niall Kelly. The opportunity for the new business was rooted in a personal experience. A friend of the founders was attacked as he responded to a traditional burglar alarm and was lucky to escape with his life. They decided that there had to be a better way than allowing someone to walk unprotected into a real life crime situation. Thus the idea for Netwatch was born.

The goal from the start was to create a fearless environment for their customers. Netwatch is an intelligent surveillance system that deploys the most advanced video processing technologies to allow a Communication Hub to watch in 'real time' any intrusion taking place on a property. The Communication Hub also has the ability to speak directly to the intruders.

Since 2005 Netwatch has expanded and currently employs over 130 people. Still headquartered in Carlow, the company now operates across eight countries in four continents.

*To grow any company, you need to build a team around you. We are proud in Netwatch of the strong team of people we have built who share our core values. In fact, early last year, the employees themselves defined these values into 2 'Do's' and 2 'Don'ts' to live The Netwatch Way. These are: always putting the customer first, always working as a team, never disrespecting another and never hiding.*

David believes that it is essential to continue to be customer focused as the business develops. *It is vital for any entrepreneur or business owner to have clarity of purpose and define your place in the market in which you are operating. We, at Netwatch, identified early on who our ideal customer was. We continue to align everything that we do to meet their security goals.* This positive attitude towards high quality customer service has enabled Netwatch to continue to stand out from its competitors.

David is very grateful to Enterprise Ireland whose market intelligence and support facilitated the company's international growth. The business has been recognised internationally, having received the 'Best in Biz' Best New Service in the USA and the European Business Awards Ruban d'Honneur for Customer Focus. One of the most significant milestones for Netwatch was having the Taoiseach launch their North American operations in Boston early in 2012.

The development of their in-house R&D Department, Netwatch Visual Labs, reflects the company's commitment to continuous innovation. *The investment in R&D is vital to ensuring that we remain as technology leaders in our field and can continue to provide exceptional levels of service to our customers across the world.*

David attributes one of his biggest challenges starting up the business to 'Energy Vampires.' A term he uses to describe negative people who are more focused on finding flaws in ideas than to actually contributing anything useful. *In the pre-startup stage the fear of failure can be a stronger emotion than the hope of success and this is the time to surround yourself with positive people. If we all looked at the negatives of starting a business, there would be a severe shortage of entrepreneurs in the world. Sometimes, you just have to take a calculated risk.*

For those thinking of setting up their own business David would advise them to focus on building a good team. *Once you have attracted the right people for your organisation then empower, trust, recognise and reward them. It will pay dividends to have everyone working together for the same end goal.* David also believes that entrepreneurs should actively seek advice from others whose experience and insights they trust. *Outside mentors and experienced people were a huge driver for Netwatch, not only in the start-up phase but still today.*

David pulls no punches when talking about the commitment needed to be successful as an entrepreneur. *While many people dream of being their own boss, make no mistake about it, starting a business is hard work. However, if you are prepared to work hard, you can build a company that actually makes a difference or changes an industry.*



## SECTION 7

### COMPARATIVE DATA ON ENTREPRENEURSHIP IN IRELAND IN 2012

**TABLE A - POTENTIAL ENTREPRENEURS: PERSONAL CONTEXT OF GENERAL POPULATION**

	<b>IRISH ADULTS Know a recent entrepreneur<sup>6</sup></b> Percentage in adult population	<b>IRISH ADULTS Opportunities in local area<sup>7</sup></b> Percentage in adult population	<b>IRISH ADULTS Skills &amp; Knowledge to start-up</b> Percentage in adult population	<b>IRISH ADULTS Fear of failure prevent start-up</b> Percentage in adult population
Austria <sup>1 2 3 4</sup>	39	49	50	44
Belgium <sup>1 2 3 4</sup>	22	33	37	46
Brazil <sup>5</sup>	34	52	54	36
Chile <sup>1</sup>	42	65	60	32
China <sup>5</sup>	52	32	38	36
Denmark <sup>1 2 3</sup>	34	44	31	42
Estonia <sup>1 2 4</sup>	38	45	43	44
Finland <sup>1 2 3 4</sup>	42	55	34	39
France <sup>1 2 3 4</sup>	34	38	36	47
Germany <sup>1 2 3 4</sup>	24	36	37	49
Greece <sup>1 2 3 4</sup>	28	13	50	72
Hungary <sup>1 2</sup>	28	11	40	46
<b>Ireland <sup>1 2 3 4</sup></b>	<b>37</b>	<b>26</b>	<b>45</b>	<b>41</b>
Israel <sup>1</sup>	29	31	29	42
Italy <sup>1 2 3 4</sup>	20	20	30	57
Japan <sup>1</sup>	14	6	9	47
Korea <sup>1</sup>	29	13	27	40
Latvia <sup>2</sup>	32	33	44	38
Lithuania <sup>2</sup>	33	30	40	46
Mexico <sup>1</sup>	42	45	62	32
Netherlands <sup>1 2 3 4</sup>	35	34	42	39
Norway <sup>1</sup>	35	64	34	36
Poland <sup>1 2</sup>	41	20	54	59
Portugal <sup>1 2 3 4</sup>	25	16	47	52
Romania <sup>2</sup>	30	37	38	45
Russia <sup>5</sup>	34	20	24	43
Slovakia <sup>1 2 4</sup>	42	18	50	48
Slovenia <sup>1 2 4</sup>	40	20	51	41
Spain <sup>1 2 3 4</sup>	31	14	50	52
Sweden <sup>1 2 3</sup>	41	66	37	39
Switzerland <sup>1</sup>	32	36	37	32
Turkey <sup>1</sup>	34	40	49	34
United Kingdom <sup>1 2 3</sup>	30	33	47	41
United States <sup>1</sup>	29	43	56	38
<b>OECD average</b>	<b>33</b>	<b>33</b>	<b>42</b>	<b>44</b>
<b>EU-27 average</b>	<b>33</b>	<b>31</b>	<b>42</b>	<b>47</b>
<b>EU-15 average</b>	<b>32</b>	<b>34</b>	<b>41</b>	<b>47</b>
<b>EURO area average</b>	<b>33</b>	<b>30</b>	<b>43</b>	<b>48</b>
<b>BR(I)C average</b>	<b>40</b>	<b>35</b>	<b>38</b>	<b>38</b>

1 Member of OECD

2 Member of European Union - EU-27

3 Member of European Union - EU-15

4 Member of EURO

5 Brazil Russia China ('BR(I)C' country)

6 Knows someone who has started a business in the past 2 years

7 Opportunities to start a business in the next six months (July 2012-December 2012)



TABLE B - ENTREPRENEURIAL ACTIVITY IN IRELAND

	Aspiring entrepreneurs Percentage in adult population	Nascent entrepreneurs Percentage in adult population	New business owners Percentage in adult population	Early stage entrepreneurs (TEA) Percentage in adult population	Early stage entrepreneurs (TEA) OECD Ranking (of 28)	Early stage entrepreneurs (TEA) EU-27 Ranking (of 22)	Early stage entrepreneurs (TEA) EU-15 Ranking (of 14)	Owner managers of established businesses Percentage in adult population
Austria <sup>1,2,3,4</sup>	11.6	6.6	3.4	9.6	8	5	2	7.6
Belgium <sup>1,2,3,4</sup>	10.7	3.3	2.0	5.2	25	20	12	5.1
Brazil <sup>5</sup>	37.3	4.5	11.3	15.4				15.2
Chile <sup>1</sup>	44.9	14.7	8.4	22.6	1			7.8
China <sup>5</sup>	21.7	5.4	7.4	12.8				12.5
Denmark <sup>1,2,3</sup>	8.4	3.1	2.4	5.4	23	18	10	3.4
Estonia <sup>1,2,4</sup>	20.1	9.5	5.1	14.3	2	1		7.2
Finland <sup>1,2,3,4</sup>	9.4	3.5	2.7	6.0	19	15	8	8.0
France <sup>1,2,3,4</sup>	18.9	3.7	1.5	5.2	26	21	13	3.2
Germany <sup>1,2,3,4</sup>	8.9	3.5	2.1	5.3	24	19	11	5.0
Greece <sup>1,2,3,4</sup>	10.4	3.8	2.8	6.5	16	12	5	12.3
Hungary <sup>1,2</sup>	15.3	5.8	3.6	9.2	10	7		8.1
Ireland <sup>1,2,3,4</sup>	<b>8.0</b>	<b>3.9</b>	<b>2.3</b>	<b>6.1</b>	<b>18</b>	<b>14</b>	<b>7</b>	<b>8.3</b>
Israel <sup>1</sup>	14.5	3.5	3.0	6.5	15			3.8
Italy <sup>1,2,3,4</sup>	11.8	2.5	1.9	4.3	27	22	14	3.3
Japan <sup>1</sup>	5.4	2.3	1.7	4.0	28			6.1
Korea <sup>1</sup>	14.6	2.6	4.1	6.6	14			9.6
Latvia <sup>2</sup>	26.9	8.7	4.8	13.4		2		7.9
Lithuania <sup>2</sup>	19.4	3.1	3.6	6.7		11		8.2
Mexico <sup>1</sup>	22.9	7.9	4.3	12.1	5			4.7
Netherlands <sup>1,2,3,4</sup>	10.1	4.1	6.3	10.3	6	3	1	9.5
Norway <sup>1</sup>	6.7	3.7	3.2	6.8	13			5.8
Poland <sup>1,2</sup>	24.2	4.8	4.6	9.4	9	6		5.8
Portugal <sup>1,2,3,4</sup>	16.2	4.3	3.6	7.7	12	10	4	6.2
Romania <sup>2</sup>	30.8	5.5	3.8	9.2		8		3.9
Russia <sup>5</sup>		2.7	1.8	4.3				2.0
Slovakia <sup>1,2,4</sup>	15.6	6.6	3.9	10.2	7	4		6.4
Slovenia <sup>1,2,4</sup>	14.7	2.9	2.5	5.4	22	17		5.8
Spain <sup>1,2,3,4</sup>	12.0	3.4	2.5	5.7	21	16	9	8.7
Sweden <sup>1,2,3</sup>	11.7	4.6	1.8	6.4	17	13	6	5.2
Switzerland <sup>1</sup>	8.3	2.9	3.0	5.9	20			8.4
Turkey <sup>1</sup>	18.8	7.3	5.4	12.2	4			8.7
United Kingdom <sup>1,2,3</sup>	11.5	5.3	3.7	9.0	11	9	3	6.2
United States <sup>1</sup>	16.5	8.9	4.1	12.8	3			8.6
OECD average	<b>14.4</b>	<b>5.0</b>	<b>3.4</b>	<b>8.2</b>				<b>6.7</b>
EU-27 average	<b>14.8</b>	<b>4.7</b>	<b>3.2</b>	<b>7.7</b>				<b>6.6</b>
EU-15 average	<b>11.4</b>	<b>4.0</b>	<b>2.8</b>	<b>6.6</b>				<b>6.6</b>
EURO area average	<b>12.7</b>	<b>4.4</b>	<b>3.0</b>	<b>7.3</b>				<b>6.9</b>
BR/IC average	<b>20.9</b>	<b>4.2</b>	<b>6.8</b>	<b>10.9</b>				<b>9.9</b>

1 Member of OECD

4 Member of EU/RO

2 Member of European Union - EU-27

5 Brazil Russia China 'BR/IC' country

3 Member of European Union - EU-15

TABLE C - 'CULTURE': PERCEPTIONS OF GENERAL POPULATION

	Entrepreneurship is a good career choice Percentage in adult population	Success at entrepreneurship has high status Percentage in adult population	Supportive media coverage of entrepreneurs Percentage in adult population
Austria <sup>1 2 3 4</sup>	46	76	n/a
Belgium <sup>1 2 3 4</sup>	62	57	54
Brazil <sup>5</sup>	89	86	86
Chile <sup>1</sup>	70	68	66
China <sup>5</sup>	72	76	80
Denmark <sup>1 2 3</sup>	n/a	n/a	n/a
Estonia <sup>1 2 4</sup>	55	63	41
Finland <sup>1 2 3 4</sup>	45	83	68
France <sup>1 2 3 4</sup>	65	77	41
Germany <sup>1 2 3 4</sup>	49	76	49
Greece <sup>1 2 3 4</sup>	64	68	33
Hungary <sup>1 2</sup>	41	74	29
<b>Ireland<sup>1 2 3 4</sup></b>	<b>45</b>	<b>81</b>	<b>61</b>
Israel <sup>1</sup>	59	72	47
Italy <sup>1 2 3 4</sup>	67	70	51
Japan <sup>1</sup>	30	55	53
Korea <sup>1</sup>	59	70	68
Latvia <sup>2</sup>	60	53	53
Lithuania <sup>2</sup>	63	53	37
Mexico <sup>1</sup>	56	54	38
Netherlands <sup>1 2 3 4</sup>	79	65	58
Norway <sup>1</sup>	50	80	59
Poland <sup>1 2</sup>	68	57	56
Portugal <sup>1 2 3 4</sup>	n/a	n/a	n/a
Romania <sup>2</sup>	71	74	55
Russia <sup>5</sup>	60	63	45
Slovakia <sup>1 2 4</sup>	50	74	59
Slovenia <sup>1 2 4</sup>	53	71	51
Spain <sup>1 2 3 4</sup>	64	64	47
Sweden <sup>1 2 3</sup>	n/a	n/a	n/a
Switzerland <sup>1</sup>	44	63	57
Turkey <sup>1</sup>	67	76	57
United Kingdom <sup>1 2 3</sup>	50	77	47
United States <sup>1</sup>	n/a	n/a	n/a
<b>OECD average</b>	<b>56</b>	<b>70</b>	<b>52</b>
<b>EU-27 average</b>	<b>58</b>	<b>69</b>	<b>50</b>
<b>EU-15 average</b>	<b>58</b>	<b>72</b>	<b>51</b>
<b>EURO area average</b>	<b>57</b>	<b>71</b>	<b>51</b>
<b>BR(I)C average</b>	<b>74</b>	<b>75</b>	<b>70</b>

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TABLE D - MOTIVATIONS OF EARLY STAGE ENTREPRENEURS

	Opportunity motives Percentage of all early stage entrepreneurs	Necessity motives Percentage of all early stage entrepreneurs
Austria <sup>1 2 3 4</sup>	88	12
Belgium <sup>1 2 3 4</sup>	81	19
Brazil <sup>5</sup>	70	30
Chile <sup>1</sup>	83	17
China <sup>5</sup>	63	37
Denmark <sup>1 2 3</sup>	92	8
Estonia <sup>1 2 4</sup>	81	19
Finland <sup>1 2 3 4</sup>	81	19
France <sup>1 2 3 4</sup>	82	18
Germany <sup>1 2 3 4</sup>	78	22
Greece <sup>1 2 3 4</sup>	70	30
Hungary <sup>1 2</sup>	68	32
<b>Ireland<sup>1 2 3 4</sup></b>	<b>72</b>	<b>28</b>
Israel <sup>1</sup>	78	22
Italy <sup>1 2 3 4</sup>	82	18
Japan <sup>1</sup>	78	22
Korea <sup>1</sup>	65	35
Latvia <sup>2</sup>	74	26
Lithuania <sup>2</sup>	75	25
Mexico <sup>1</sup>	86	14
Netherlands <sup>1 2 3 4</sup>	91	9
Norway <sup>1</sup>	92	8
Poland <sup>1 2</sup>	57	43
Portugal <sup>1 2 3 4</sup>	80	20
Romania <sup>2</sup>	76	24
Russia <sup>5</sup>	63	37
Slovakia <sup>1 2 4</sup>	64	36
Slovenia <sup>1 2 4</sup>	92	8
Spain <sup>1 2 3 4</sup>	74	26
Sweden <sup>1 2 3</sup>	93	7
Switzerland <sup>1</sup>	80	20
Turkey <sup>1</sup>	68	32
United Kingdom <sup>1 2 3</sup>	81	19
United States <sup>1</sup>	78	22
<b>OECD average</b>	<b>79</b>	<b>21</b>
<b>EU-27 average</b>	<b>79</b>	<b>21</b>
<b>EU-15 average</b>	<b>82</b>	<b>18</b>
<b>EURO area average</b>	<b>80</b>	<b>20</b>
<b>BR(I)C average</b>	<b>65</b>	<b>35</b>

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**TABLE E - EMPLOYMENT STATUS AND HOUSEHOLD INCOME OF EARLY STAGE ENTREPRENEURS**

	Early stage entrepreneurial activity by adults in employment Percentage in adult population	Early stage entrepreneurial activity by adults not working Percentage in adult population	Early stage entrepreneurial activity by students or retired Percentage in adult population	Household income in lowest third of population Percentage of adult population	Household income in middle third of population Percentage of adult population	Household Income in highest third of population Percentage of adult population
Austria <sup>1 2 3 4</sup>	11.4	4.9	2.7	3.7	4.4	5.3
Belgium <sup>1 2 3 4</sup>	5.9	1.8	0.7	1.8	2.8	3.7
Brazil <sup>5</sup>	22.1	n/a	n/a	11.3	13.5	15.1
Chile <sup>1</sup>	26.4	6.8	10.6	10.3	12.1	20.1
China <sup>5</sup>	16.7	1.7	0.7	8.0	12.0	14.4
Denmark <sup>1 2 3</sup>	6.9	1.1	1.7	1.9	3.2	4.8
Estonia <sup>1 2 4</sup>	15.8	8.5	2.0	4.8	7.2	14.2
Finland <sup>1 2 3 4</sup>	7.0	3.8	1.5	2.8	3.7	6.4
France <sup>1 2 3 4</sup>	6.3	5.4	0.6	2.7	3.8	4.2
Germany <sup>1 2 3 4</sup>	5.7	5.6	2.8	2.7	3.4	6.0
Greece <sup>1 2 3 4</sup>	11.7	n/a	n/a	n/a	2.8	4.0
Hungary <sup>1 2</sup>	12.0	4.2	2.8	4.1	4.9	10.0
<b>Ireland <sup>1 2 3 4</sup></b>	<b>7.7</b>	<b>3.8</b>	<b>1.1</b>	<b>2.9</b>	<b>3.0</b>	<b>5.1</b>
Israel <sup>1</sup>	8.8	2.7	1.9	2.7	4.9	4.9
Italy <sup>1 2 3 4</sup>	6.3	1.2	1.9	1.8	1.8	1.3
Japan <sup>1</sup>	4.9	1.0	2.9	1.9	1.4	2.1
Korea <sup>1</sup>	9.2	0.5	0.5	2.9	4.4	5.7
Latvia <sup>2</sup>	15.0	5.9	1.7	3.7	4.9	12.4
Lithuania <sup>2</sup>	7.9	2.0	1.8	1.4	3.7	5.5
Mexico <sup>1</sup>	16.5	4.5	1.0	3.4	6.0	7.7
Netherlands <sup>1 2 3 4</sup>	12.0	0.7	1.5	3.9	6.5	9.6
Norway <sup>1</sup>	7.4	3.1	1.6	5.2	4.7	7.0
Poland <sup>1 2</sup>	11.7	7.4	3.4	6.6	7.8	10.0
Portugal <sup>1 2 3 4</sup>	10.4	2.0	2.1	2.0	2.8	4.5
Romania <sup>2</sup>	13.4	2.6	1.6	2.1	5.2	11.2
Russia <sup>5</sup>	5.0	4.0	1.0	1.2	2.3	3.0
Slovakia <sup>1 2 4</sup>	12.4	5.3	2.2	3.6	7.3	10.3
Slovenia <sup>1 2 4</sup>	7.2	2.3	1.0	1.8	2.3	2.5
Spain <sup>1 2 3 4</sup>	8.0	3.1	1.2	1.0	1.9	3.5
Sweden <sup>1 2 3</sup>	6.7	6.8	3.5	4.3	3.4	5.4
Switzerland <sup>1</sup>	7.0	1.5	n/a	2.3	2.6	6.3
Turkey <sup>1</sup>	21.5	n/a	n/a	2.0	4.5	10.7
United Kingdom <sup>1 2 3</sup>	9.8	10.1	2.8	4.6	4.7	6.9
United States <sup>1</sup>	15.5	4.9	2.7	7.5	6.9	11.8
<b>OECD average</b>	<b>10.4</b>	<b>4.0</b>	<b>2.3</b>	<b>3.5</b>	<b>4.5</b>	<b>6.9</b>
<b>EU-27 average</b>	<b>9.6</b>	<b>4.2</b>	<b>1.9</b>	<b>3.1</b>	<b>4.2</b>	<b>6.7</b>
<b>EU-15 average</b>	<b>8.3</b>	<b>3.9</b>	<b>1.8</b>	<b>2.8</b>	<b>3.5</b>	<b>5.1</b>
<b>EURO area average</b>	<b>9.1</b>	<b>3.7</b>	<b>1.6</b>	<b>2.7</b>	<b>3.9</b>	<b>5.8</b>
<b>BR(I)C average</b>	<b>14.6</b>	<b>2.9</b>	<b>0.9</b>	<b>6.9</b>	<b>9.3</b>	<b>10.8</b>

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TABLE F - EDUCATION LEVEL OF EARLY STAGE ENTREPRENEURS

	Early stage entrepreneurs with some secondary education as highest qualification As a percentage of all adults in this education category	Early stage entrepreneurs with secondary school as highest qualification As a percentage of all adults in this education category	Early stage entrepreneurs with post-secondary education as highest qualification As a percentage of all adults in this education category	Early stage entrepreneurs with graduate education as highest qualification As a percentage of all adults in this education category	Early stage entrepreneurs with post-secondary education Percentage of all early stage entrepreneurs
Austria <sup>1 2 3 4</sup>	6.9	7.9	11.6	14.7	39
Belgium <sup>1 2 3 4</sup>	4.0	2.8	6.3	9.0	69
Brazil <sup>5</sup>	14.0	16.3	17.6	11.7	15
Chile <sup>1</sup>	16.6	20.5	24.5	17.2	41
China <sup>5</sup>	12.1	12.5	14.0	16.7	26
Denmark <sup>1 2 3</sup>	4.1	4.7	5.6	5.5	74
Estonia <sup>1 2 4</sup>	10.8	12.3	17.7	14.4	43
Finland <sup>1 2 3 4</sup>	2.3	5.8	7.5	7.3	40
France <sup>1 2 3 4</sup>	3.9	4.7	6.4	n/a	52
Germany <sup>1 2 3 4</sup>	2.0	5.7	7.8	n/a	48
Greece <sup>1 2 3 4</sup>	2.3	4.3	8.1	10.5	64
Hungary <sup>1 2</sup>	6.6	9.6	10.5	12.4	44
<b>Ireland<sup>1 2 3 4</sup></b>	<b>3.7</b>	<b>4.0</b>	<b>6.7</b>	<b>7.8</b>	<b>73</b>
Israel <sup>1</sup>	2.4	5.6	7.6	2.7	60
Italy <sup>1 2 3 4</sup>	4.0	4.3	n/a	5.4	17
Japan <sup>1</sup>	3.2	3.1	4.1	2.5	57
Korea <sup>1</sup>	2.9	5.9	6.8	5.5	67
Latvia <sup>2</sup>	2.7	10.8	19.7	15.6	50
Lithuania <sup>2</sup>	4.8	6.7	6.6	n/a	69
Mexico <sup>1</sup>	11.5	10.4	16.4	9.9	14
Netherlands <sup>1 2 3 4</sup>	8.5	8.4	15.4	14.6	42
Norway <sup>1</sup>	10.1	6.5	5.4	8.0	53
Poland <sup>1 2</sup>	3.6	10.5	8.6	9.6	25
Portugal <sup>1 2 3 4</sup>	6.0	7.9	10.5	n/a	42
Romania <sup>2</sup>	6.4	8.1	12.5	22.8	39
Russia <sup>5</sup>	2.3	3.2	4.4	6.1	75
Slovakia <sup>1 2 4</sup>	6.0	9.2	15.5	16.6	41
Slovenia <sup>1 2 4</sup>	2.3	4.8	6.8	8.8	53
Spain <sup>1 2 3 4</sup>	3.4	6.2	6.5	9.5	40
Sweden <sup>1 2 3</sup>	1.3	6.6	6.7	11.2	45
Switzerland <sup>1</sup>	0.9	4.7	9.7	11.2	46
Turkey <sup>1</sup>	8.6	11.8	16.3	22.7	45
United Kingdom <sup>1 2 3</sup>	5.2	8.2	11.1	9.5	65
United States <sup>1</sup>	9.9	8.5	13.0	14.5	67
<b>OECD average</b>	<b>5.5</b>	<b>7.3</b>	<b>10.1</b>	<b>10.4</b>	<b>49</b>
<b>EU-27 average</b>	<b>4.6</b>	<b>7.0</b>	<b>9.9</b>	<b>11.4</b>	<b>49</b>
<b>EU-15 average</b>	<b>4.1</b>	<b>5.8</b>	<b>8.5</b>	<b>9.5</b>	<b>51</b>
<b>EURO area average</b>	<b>4.7</b>	<b>6.3</b>	<b>9.8</b>	<b>10.8</b>	<b>47</b>
<b>BR(I)C average</b>	<b>9.5</b>	<b>10.6</b>	<b>12.0</b>	<b>11.5</b>	<b>39</b>

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TABLE G - EDUCATION LEVEL AND HOUSEHOLD INCOME OF ESTABLISHED OWNER MANAGERS

	Established owner managers with some secondary education As percentage of all adults in this education category	Established owner managers with secondary school as highest qualification As percentage of all adults in this education category	Established owner managers with post-secondary as highest qualification As percentage of all adults in this education category	Established owner managers with graduate education as highest qualification As percentage of all adults in this education category	Established owner managers with household income in lowest third of population As percentage of all adults in this income category	Established owner managers with household income in middle third of population As percentage of all adults in this income category	Established owner managers with household income in highest third of population As percentage of all adults in this income category
Austria <sup>1 2 3 4</sup>	4.4	6.8	6.3	12.3	2.1	2.5	5.1
Belgium <sup>1 2 3 4</sup>	2.1	4.9	6.9	1.6	0.6	2.3	4.0
Brazil <sup>5</sup>	9.5	12.4	13.6	17.1	10.7	13.7	14.0
Chile <sup>1</sup>	10.5	6.8	6.9	6.7	3.0	5.4	5.9
China <sup>5</sup>	15.0	12.2	5.6	3.8	12.7	10.1	11.9
Denmark <sup>1 2 3</sup>	1.3	2.9	3.2	6.4	0.9	1.6	4.2
Estonia <sup>1 2 4</sup>	1.4	4.8	10.8	12.8	2.3	2.9	7.1
Finland <sup>1 2 3 4</sup>	13.0	7.8	6.6	7.2	2.4	5.2	9.1
France <sup>1 2 3 4</sup>	2.3	2.7	4.4	n/a	1.4	1.9	3.7
Germany <sup>1 2 3 4</sup>	2.9	5.1	6.6	n/a	1.8	2.7	5.2
Greece <sup>1 2 3 4</sup>	11.6	11.9	13.3	5.7	n/a	5.9	7.1
Hungary <sup>1 2</sup>	5.6	7.4	10.4	16.4	2.6	3.4	8.7
Ireland <sup>1 2 3 4</sup>	10.1	6.9	7.6	8.9	4.5	5.1	7.0
Israel <sup>1</sup>	3.0	1.4	4.0	4.9	0.6	1.7	4.8
Italy <sup>1 2 3 4</sup>	4.1	3.1	n/a	4.2	1.1	1.0	1.2
Japan <sup>1</sup>	4.3	5.1	6.5	1.5	2.6	2.1	3.9
Korea <sup>1</sup>	8.5	11.8	8.0	3.3	5.2	5.6	8.2
Latvia <sup>2</sup>	3.5	5.8	11.9	10.7	2.5	3.2	6.3
Lithuania <sup>2</sup>	3.6	4.3	9.9	n/a	2.7	3.4	6.6
Mexico <sup>1</sup>	3.4	4.3	8.4	8.4	1.0	0.8	3.5
Netherlands <sup>1 2 3 4</sup>	n/a	8.9	12.4	11.1	3.5	6.2	9.6
Norway <sup>1</sup>	8.7	5.3	4.5	7.5	2.3	3.6	7.7
Poland <sup>1 2</sup>	2.8	5.4	4.2	10.0	3.0	3.9	7.7
Portugal <sup>1 2 3 4</sup>	6.0	1.0	7.1	n/a	1.3	1.9	3.5
Romania <sup>2</sup>	1.7	5.3	4.6	5.8	0.8	1.9	4.8
Russia <sup>5</sup>	0.9	1.8	2.1	2.7	0.4	0.9	1.8
Slovakia <sup>1 2 4</sup>	5.0	7.6	3.0	7.2	2.9	3.7	6.0
Slovenia <sup>1 2 4</sup>	5.5	4.3	7.8	7.1	1.2	2.1	3.9
Spain <sup>1 2 3 4</sup>	9.7	7.5	8.1	6.7	1.3	2.6	4.5
Sweden <sup>1 2 3</sup>	7.1	3.5	6.4	9.5	2.1	3.4	4.4
Switzerland <sup>1</sup>	3.8	5.6	15.4	22.2	3.7	3.2	8.6
Turkey <sup>1</sup>	11.0	9.5	8.2	10.8	0.9	3.1	7.2
United Kingdom <sup>1 2 3</sup>	7.8	5.7	4.8	7.2	2.1	2.6	5.6
United States <sup>1</sup>	5.5	5.6	9.1	9.9	2.8	5.2	8.6
OECD average	6.0	5.9	7.4	8.4	2.2	3.3	5.9
EU-27 average	5.3	5.6	7.4	8.4	2.0	3.2	5.7
EU-15 average	6.3	5.6	7.2	7.3	1.9	3.2	5.3
EURO area average	6.0	6.0	7.8	7.7	2.0	3.3	5.5
BR/IC average	8.5	8.8	7.1	7.9	7.9	8.2	9.2

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TABLE H - ENTREPRENEURIAL TEAMS

	Nascent entrepreneurs Expected number of owners	New business owners Number of owners	Early stage entrepreneurs (TEA) Number of expected or actual owners	Established owner managers Number of owners
Austria <sup>1 2 3 4</sup>	1.6	n/a	1.6	1.5
Belgium <sup>1 2 3 4</sup>	2.3	1.6	2.1	1.4
Brazil <sup>5</sup>	1.7	1.4	1.5	1.3
Chile <sup>1</sup>	2.0	1.6	1.9	1.4
China <sup>5</sup>	1.4	1.5	1.5	1.4
Denmark <sup>1 2 3</sup>	2.3	1.8	2.1	1.5
Estonia <sup>1 2 4</sup>	2.1	2.2	2.2	2.0
Finland <sup>1 2 3 4</sup>	2.5	1.7	2.2	2.0
France <sup>1 2 3 4</sup>	2.1	1.9	2.0	1.7
Germany <sup>1 2 3 4</sup>	1.9	1.8	1.9	1.3
Greece <sup>1 2 3 4</sup>	1.9	1.5	1.8	1.6
Hungary <sup>1 2</sup>	1.8	1.9	1.8	1.7
<b>Ireland<sup>1 2 3 4</sup></b>	<b>2.3</b>	<b>1.7</b>	<b>2.1</b>	<b>1.6</b>
Israel <sup>1</sup>	1.4	1.5	1.5	1.6
Italy <sup>1 2 3 4</sup>	1.8	2.3	2.0	2.0
Japan <sup>1</sup>	2.3	2.1	2.2	2.2
Korea <sup>1</sup>	1.6	1.7	1.7	1.2
Latvia <sup>2</sup>	2.0	1.9	1.9	1.7
Lithuania <sup>2</sup>	2.1	1.9	2.0	1.6
Mexico <sup>1</sup>	1.5	1.5	1.5	1.5
Netherlands <sup>1 2 3 4</sup>	1.9	1.4	1.6	1.6
Norway <sup>1</sup>	2.4	2.4	2.3	1.7
Poland <sup>1 2</sup>	1.4	1.3	1.3	1.5
Portugal <sup>1 2 3 4</sup>	1.9	n/a	2.1	1.6
Romania <sup>2</sup>	2.0	1.8	1.9	1.5
Russia <sup>5</sup>	1.6	1.3	1.5	1.3
Slovakia <sup>1 2 4</sup>	1.9	1.7	1.8	1.7
Slovenia <sup>1 2 4</sup>	2.2	1.7	2.0	1.8
Spain <sup>1 2 3 4</sup>	2.0	1.6	1.8	3.6
Sweden <sup>1 2 3</sup>	1.9	1.5	1.8	1.9
Switzerland <sup>1</sup>	1.6	2.0	1.8	1.5
Turkey <sup>1</sup>	2.1	2.3	2.2	1.7
United Kingdom <sup>1 2 3</sup>	1.7	1.6	1.6	1.9
United States <sup>1</sup>	1.8	1.9	1.8	n/a
<b>OECD average</b>	<b>1.9</b>	<b>1.8</b>	<b>1.9</b>	<b>1.7</b>
<b>EU-27 average</b>	<b>2.0</b>	<b>1.7</b>	<b>1.9</b>	<b>1.8</b>
<b>EU-15 average</b>	<b>2.0</b>	<b>1.7</b>	<b>1.9</b>	<b>1.8</b>
<b>EURO area average</b>	<b>2.0</b>	<b>1.8</b>	<b>1.9</b>	<b>1.8</b>
<b>BR(I)C average</b>	<b>1.6</b>	<b>1.4</b>	<b>1.5</b>	<b>1.3</b>

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**TABLE I - ENTREPRENEURIAL COLLABORATIONS**

Early stage entrepreneurs working together with other enterprises or organisations				Established owner managers working together with other enterprises or organisations					
To produce goods or services	To procure supplies	To make your business more effective	To produce goods or services	To procure supplies	To make your business more effective	To sell products or services to current customers	To sell products or services to new customers	To create new products or services to current customers	To create new products or services to new customers
Percentage of all early stage entrepreneurs	Percentage of all early stage entrepreneurs	Percentage of all early stage entrepreneurs	Percentage of all established owner managers	Percentage of all established owner managers	Percentage of all established owner managers	Percentage of all established owner managers	Percentage of all established owner managers	Percentage of all established owner managers	Percentage of all established owner managers
Austria <sup>1 2 3 4</sup>	52	56	58	38	40	46	40	38	34
Belgium <sup>1 2 3 4</sup>	55	58	60	38	20	6	13	11	5
Brazil <sup>5</sup>	48	45	41	12	8	8	8	5	4
Chile <sup>1</sup>	73	71	79	66	18	28	24	19	20
China <sup>5</sup>	55	53	52	38	28	26	18	18	15
Denmark <sup>1 2 3</sup>	60	60	58	32	27	27	35	24	18
Estonia <sup>1 2 4</sup>	65	69	71	57	48	55	60	42	41
Finland <sup>1 2 3 4</sup>	43	44	43	51	58	44	38	27	23
France <sup>1 2 3 4</sup>	60	55	56	57	43	31	22	15	17
Germany <sup>1 2 3 4</sup>	52	52	55	33	30	44	41	34	36
Greece <sup>1 2 3 4</sup>	36	29	35	75	38	41	37	33	29
Hungary <sup>1 2</sup>	50	57	59	46	41	39	39	31	29
Ireland <sup>1 2 3 4</sup>	<b>34</b>	<b>36</b>	<b>41</b>	<b>35</b>	<b>46</b>	<b>47</b>	<b>43</b>	<b>28</b>	<b>30</b>
Israel <sup>1</sup>	60	64	62	47	39	51	46	41	35
Italy <sup>1 2 3 4</sup>	57	50	58	40	53	46	53	34	38
Japan <sup>1</sup>	36	36	37	53	43	51	44	29	29
Korea <sup>1</sup>	44	44	39	32	45	45	38	40	38
Latvia <sup>2</sup>	61	55	66	59	56	53	47	34	31
Lithuania <sup>2</sup>	39	42	43	41	39	41	32	27	25
Mexico <sup>1</sup>	60	60	65	57	20	26	31	28	27
Netherlands <sup>1 2 3 4</sup>	53	42	57	25	32	33	32	31	27
Norway <sup>1</sup>	48	59	46	22	36	49	49	28	22
Poland <sup>1 2</sup>	57	62	64	66	62	53	62	27	27
Portugal <sup>1 2 3 4</sup>	59	53	65	37	33	30	28	26	23
Romania <sup>2</sup>	70	70	76	68	49	41	35	23	26
Russia <sup>5</sup>	64	67	100	36	n/a	21	33	n/a	n/a
Slovakia <sup>1 2 4</sup>	58	60	65	66	53	48	41	37	27
Slovenia <sup>1 2 4</sup>	50	49	62	49	29	46	41	42	40
Spain <sup>1 2 3 4</sup>	40	37	44	68	25	24	24	14	14
Sweden <sup>1 2 3</sup>	48	57	62	31	28	50	47	32	41
Switzerland <sup>1</sup>	39	37	44	34	39	39	34	28	26
Turkey <sup>1</sup>	60	56	65	37	31	37	29	35	35
United Kingdom <sup>1 2 3</sup>	67	71	69	19	29	25	32	21	18
United States <sup>1</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
OECD average	<b>52</b>	<b>53</b>	<b>56</b>	<b>45</b>	<b>37</b>	<b>39</b>	<b>37</b>	<b>29</b>	<b>28</b>
EU-27 average	<b>53</b>	<b>53</b>	<b>58</b>	<b>47</b>	<b>40</b>	<b>40</b>	<b>37</b>	<b>29</b>	<b>27</b>
EU-15 average	<b>51</b>	<b>50</b>	<b>54</b>	<b>41</b>	<b>36</b>	<b>35</b>	<b>35</b>	<b>26</b>	<b>25</b>
EURO area average	<b>51</b>	<b>49</b>	<b>55</b>	<b>48</b>	<b>39</b>	<b>39</b>	<b>37</b>	<b>29</b>	<b>27</b>
BRIC average	<b>56</b>	<b>55</b>	<b>64</b>	<b>29</b>	<b>18</b>	<b>18</b>	<b>20</b>	<b>11</b>	<b>10</b>

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TABLE J - EXITS

	Entrepreneurs exited in the last 12 months AND business discontinued Percentage in adult population	Entrepreneurs exited in the last 12 months AND business continued Percentage in adult population
Austria <sup>1 2 3 4</sup>	2.3	1.3
Belgium <sup>1 2 3 4</sup>	1.4	1.0
Brazil <sup>5</sup>	3.2	1.3
Chile <sup>1</sup>	3.4	1.5
China <sup>5</sup>	2.4	1.3
Denmark <sup>1 2 3</sup>	1.1	0.3
Estonia <sup>1 2 4</sup>	2.5	1.5
Finland <sup>1 2 3 4</sup>	1.1	0.8
France <sup>1 2 3 4</sup>	1.2	0.8
Germany <sup>1 2 3 4</sup>	1.2	0.8
Greece <sup>1 2 3 4</sup>	3.7	0.8
Hungary <sup>1 2</sup>	2.8	0.9
<b>Ireland<sup>1 2 3 4</sup></b>	<b>1.2</b>	<b>0.5</b>
Israel <sup>1</sup>	2.5	1.5
Italy <sup>1 2 3 4</sup>	1.6	0.8
Japan <sup>1</sup>	0.6	0.5
Korea <sup>1</sup>	2.0	1.2
Latvia <sup>2</sup>	2.2	1.2
Lithuania <sup>2</sup>	1.5	0.7
Mexico <sup>1</sup>	2.6	1.7
Netherlands <sup>1 2 3 4</sup>	1.5	0.7
Norway <sup>1</sup>	1.1	0.4
Poland <sup>1 2</sup>	2.4	1.5
Portugal <sup>1 2 3 4</sup>	2.1	0.9
Romania <sup>2</sup>	2.7	1.1
Russia <sup>5</sup>	0.8	0.2
Slovakia <sup>1 2 4</sup>	3.0	1.7
Slovenia <sup>1 2 4</sup>	0.8	0.8
Spain <sup>1 2 3 4</sup>	1.6	0.5
Sweden <sup>1 2 3</sup>	1.6	0.3
Switzerland <sup>1</sup>	0.9	1.1
Turkey <sup>1</sup>	3.3	2.0
United Kingdom <sup>1 2 3</sup>	1.2	0.5
United States <sup>1</sup>	2.8	1.6
<b>OECD average</b>	<b>1.9</b>	<b>1.0</b>
<b>EU-27 average</b>	<b>1.8</b>	<b>0.9</b>
<b>EU-15 average</b>	<b>1.6</b>	<b>0.7</b>
<b>EURO area average</b>	<b>1.8</b>	<b>0.9</b>
<b>BR(I)C average</b>	<b>2.2</b>	<b>0.9</b>

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TABLE K - REASONS FOR EXITS

	Opportunity to sell the business Percentage of all entrepreneurs exiting	Business was not profitable Percentage of all entrepreneurs exiting	Problems getting finance Percentage of all entrepreneurs exiting	Found another job or business opportunity Percentage of all entrepreneurs exiting	Exit was planned in advance Percentage of all entrepreneurs exiting	Retirement Percentage of all entrepreneurs exiting	Reason of personal nature Percentage of all entrepreneurs exiting	Consequence of single incident Percentage of all entrepreneurs exiting	No reason offered Percentage of all entrepreneurs exiting
Austria <sup>1,2,3,4</sup>	6	25	4	16	4	18	16	2	7
Belgium <sup>1,2,3,4</sup>	5	13	26	30	0	6	19	0	0
Brazil <sup>5</sup>	4	29	16	9	2	0	36	4	0
Chile <sup>1</sup>	6	19	19	15	6	0	21	1	14
China <sup>5</sup>	1	36	12	7	3	2	32	0	7
Denmark <sup>1,2,3</sup>	0	15	0	16	2	0	12	4	50
Estonia <sup>1,2,4</sup>	5	35	6	10	12	4	11	3	14
Finland <sup>1,2,3,4</sup>	3	14	3	18	10	21	15	2	15
France <sup>1,2,3,4</sup>	0	21	27	7	8	13	17	6	0
Germany <sup>1,2,3,4</sup>	5	22	9	6	4	2	31	2	19
Greece <sup>1,2,3,4</sup>	3	49	7	2	0	37	2	0	0
Hungary <sup>1,2</sup>	0	36	34	3	0	5	9	0	14
Ireland <sup>1,2,3,4</sup>	0	42	17	7	3	2	20	5	3
Israel <sup>1</sup>	11	29	11	7	0	3	24	4	11
Italy <sup>1,2,3,4</sup>	4	26	15	14	2	1	23	6	8
Japan <sup>1</sup>	0	24	5	9	0	5	33	0	25
Korea <sup>1</sup>	3	51	7	0	3	3	22	3	9
Latvia <sup>2</sup>	1	40	10	4	0	1	10	0	32
Lithuania <sup>2</sup>	11	25	11	11	7	0	9	2	23
Mexico <sup>1</sup>	6	32	23	7	2	3	20	3	4
Netherlands <sup>1,2,3,4</sup>	2	21	9	16	4	4	18	0	26
Norway <sup>1</sup>	3	14	7	10	10	0	17	3	34
Poland <sup>1,2</sup>	5	24	8	11	13	0	20	4	15
Portugal <sup>1,2,3,4</sup>	4	44	10	3	0	0	14	5	20
Romania <sup>2</sup>	0	40	16	1	1	3	20	0	19
Russia <sup>5</sup>	3	26	17	11	0	0	8	11	23
Slovakia <sup>1,2,4</sup>	2	43	7	8	3	3	11	7	16
Slovenia <sup>1,2,4</sup>	4	11	21	7	7	11	12	10	16
Spain <sup>1,2,3,4</sup>	5	59	7	4	1	2	6	2	15
Sweden <sup>1,2,3</sup>	0	19	10	7	2	6	17	6	32
Switzerland <sup>1</sup>	9	28	16	6	0	6	9	6	19
Turkey <sup>1</sup>	5	25	19	4	1	8	21	0	17
United Kingdom <sup>1,2,3</sup>	8	38	10	14	14	2	11	0	3
United States <sup>1</sup>	3	27	18	8	3	1	12	6	21
OECD average	4	29	13	10	4	6	17	4	14
EU-27 average	3	30	12	10	4	7	15	3	16
EU-15 average	3	29	11	11	4	8	16	3	14
EURO area average	3	30	12	11	4	9	15	4	11
BR/IC average	2	30	15	9	2	1	25	5	10

Numbers are rounded to  
whole numbers, so in some  
instances may not sum to 100.

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5 Brazil Russia China (BR/IC country)

TABLE L - EARLY STAGE ENTREPRENEURIAL ACTIVITY BY IMMIGRANTS

EARLY STAGE ENTREPRENEURS					NEW BUSINESS OWNERS				EARLY STAGE ENTREPRENEURS		
Immigrant (parent or respondent) early stage entrepreneurs Percentage in immigrant (respondent or parent) adult population	First generation immigrant early stage entrepreneurs Percentage in first generation immigrant adult population	Second generation immigrant early stage entrepreneurs Percentage in second generation immigrant adult population	Non immigrant (neither parents or respondent) early stage entrepreneurs Percentage in non immigrant (respondent or parent) adult population	Immigrant (parent or respondent) new business owner Percentage in immigrant (respondent or parent) adult population	First generation immigrant new business owner Percentage in first generation immigrant adult population	Second generation immigrant new business owner Percentage in second generation immigrant adult population	Non immigrant (neither parents or respondent) new business owner Percentage in non immigrant (respondent or parent) adult population	Immigrants with opportunity motives Percentage of immigrant (respondent or parent) entrepreneurs	Non immigrants with opportunity motives Percentage of non immigrant (neither respondent nor parent) entrepreneurs	Non immigrants with opportunity motives Percentage of non immigrant (respondent not immigrant) entrepreneurs	
Austria <sup>1 2 3 4</sup>	13.4	15.9	13.2	9.0	4.6	5.9	4.7	3.2	82	81	82
Belgium <sup>1 2 3 4</sup>	6.8	9.4	6.7	5.0	1.6	3.6	1.7	2.0	78	76	77
Brazil <sup>5</sup>	14.1	9.2	14.3	15.5	6.5	9.2	6.6	11.4	60	70	69
Chile <sup>1</sup>	18.4	18.2	15.5	22.7	3.1	3.9	3.5	8.6	96	82	82
China <sup>5</sup>	n/a	n/a	n/a	12.8	n/a	n/a	n/a	7.4	n/a	62	62
Denmark <sup>1 2 3</sup>	5.6	5.6	5.5	5.3	2.4	1.9	2.5	2.3	90	90	90
Estonia <sup>1 2 4</sup>	12.2	9.2	12.1	15.1	4.5	3.1	4.4	5.3	80	79	79
Finland <sup>1 2 3 4</sup>	6.1	0.0	9.2	6.0	4.1	0.0	6.1	2.6	67	74	74
France <sup>1 2 3 4</sup>	6.7	7.8	6.6	4.6	1.4	2.0	1.2	1.6	75	84	81
Germany <sup>1 2 3 4</sup>	6.9	5.4	6.9	4.9	1.8	2.1	1.9	2.2	60	84	79
Greece <sup>1 2 3 4</sup>	7.5	6.9	5.2	6.4	3.7	3.8	3.2	2.8	92	68	69
Hungary <sup>1 2</sup>	14.8	18.8	15.3	8.9	5.3	8.0	5.5	3.5	79	65	65
Ireland <sup>1 2 3 4</sup>	7.2	7.6	7.2	5.8	2.7	3.0	2.9	2.2	73	70	70
Israel <sup>1</sup>	5.6	4.0	5.7	7.7	2.5	1.3	2.6	3.7	77	61	67
Italy <sup>1 2 3 4</sup>	7.8	6.1	8.2	4.1	2.8	1.0	2.7	1.9	83	71	71
Japan <sup>1</sup>	8.4	27.2	0.0	4.0	8.4	27.2	0.0	1.7	0	75	75
Korea <sup>1</sup>	0.0	0.0	0.0	6.7	0.0	0.0	0.0	4.1	n/a	64	64
Latvia <sup>2</sup>	12.5	11.4	12.2	13.9	5.1	4.3	4.7	4.1	71	73	75
Lithuania <sup>2</sup>	4.7	1.6	4.7	6.8	2.0	1.6	1.6	3.8	71	72	73
Mexico <sup>1</sup>	10.4	0.0	11.7	12.1	0.0	0.0	0.0	4.3	100	85	85
Netherlands <sup>1 2 3 4</sup>	7.9	6.5	7.9	10.7	5.3	3.9	5.3	6.4	93	83	83
Norway <sup>1</sup>	10.1	11.7	10.2	6.4	4.5	5.8	4.8	3.0	90	89	89
Poland <sup>1 2</sup>	19.1	4.8	19.4	8.8	7.1	0.0	7.2	4.4	54	53	53
Portugal <sup>1 2 3 4</sup>	9.5	9.2	10.0	7.4	4.6	4.6	3.6	3.5	72	73	74
Romania <sup>2</sup>	15.9	8.9	16.2	9.1	10.8	0.0	11.1	3.7	84	75	75
Russia <sup>5</sup>	7.4	7.7	7.2	4.1	2.5	3.4	2.4	1.7	71	61	62
Slovakia <sup>1 2 4</sup>	9.7	10.6	8.5	10.3	4.0	5.5	3.1	3.9	60	64	63
Slovenia <sup>1 2 4</sup>	5.3	3.3	5.8	5.4	2.8	2.6	3.1	2.5	73	93	91
Spain <sup>1 2 3 4</sup>	8.8	9.5	8.1	5.5	3.5	3.7	3.7	2.4	72	72	72
Sweden <sup>1 2 3</sup>	8.7	10.5	8.4	5.9	2.6	3.9	2.7	1.7	86	86	86
Switzerland <sup>1</sup>	8.7	9.1	8.0	5.0	5.0	3.5	5.3	2.4	60	76	76
Turkey <sup>1</sup>	14.2	14.2	12.3	12.1	6.4	5.5	6.6	5.3	80	66	66
United Kingdom <sup>1 2 3</sup>	13.6	13.6	14.1	7.6	5.4	5.8	5.5	3.2	81	79	80
United States <sup>1</sup>	12.7	16.4	12.3	12.9	4.5	5.4	4.2	4.0	76	75	75
OECD average	9.5	9.3	9.1	8.1	3.7	4.2	3.5	3.4	75	76	76
EU-27 average	9.6	8.3	9.6	7.6	4.0	3.2	4.0	3.2	76	76	76
EU-15 average	8.3	8.2	8.4	6.3	3.3	3.2	3.4	2.7	79	78	78
EURO area average	8.3	7.7	8.3	7.2	3.4	3.2	3.4	3.0	76	77	76
BRIC average	10.7	8.4	10.8	10.8	4.5	6.3	4.5	6.9	66	64	65

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2 Member of European Union - EU-27

5 Brazil Russia China (BRIC) country

3 Member of European Union - EU-15

TABLE M - INFORMAL INVESTORS: RATES AND AMOUNTS

	Informal investors <sup>6</sup>	Total invested in past 3 years <sup>7</sup> €
Austria <sup>1 2 3 4</sup>	6.3	20,600
Belgium <sup>1 2 3 4</sup>	3.1	22,200
Brazil <sup>5</sup>	2.3	4,900
Chile <sup>1</sup>	13.0	1,800
China <sup>5</sup>	5.4	7,200
Denmark <sup>1 2 3</sup>	3.0	63,100
Estonia <sup>1 2 4</sup>	8.7	6,300
Finland <sup>1 2 3 4</sup>	3.1	12,600
France <sup>1 2 3 4</sup>	3.0	23,800
Germany <sup>1 2 3 4</sup>	3.0	30,700
Greece <sup>1 2 3 4</sup>	3.0	44,200
Hungary <sup>1 2</sup>	4.5	6,700
<b>Ireland<sup>1 2 3 4</sup></b>	<b>3.7</b>	<b>29,900</b>
Israel <sup>1</sup>	6.0	28,800
Italy <sup>1 2 3 4</sup>	2.4	19,200
Japan <sup>1</sup>	1.4	44,900
Korea <sup>1</sup>	2.5	49,300
Latvia <sup>2</sup>	7.3	18,100
Lithuania <sup>2</sup>	9.3	7,900
Mexico <sup>1</sup>	7.3	1,400
Netherlands <sup>1 2 3 4</sup>	3.6	30,800
Norway <sup>1</sup>	3.2	43,600
Poland <sup>1 2</sup>	4.1	17,900
Portugal <sup>1 2 3 4</sup>	2.3	51,900
Romania <sup>2</sup>	6.2	10,000
Russia <sup>5</sup>	1.6	8,100
Slovakia <sup>1 2 4</sup>	7.2	23,000
Slovenia <sup>1 2 4</sup>	3.8	21,300
Spain <sup>1 2 3 4</sup>	3.9	24,200
Sweden <sup>1 2 3</sup>	4.2	7,900
Switzerland <sup>1</sup>	4.7	52,100
Turkey <sup>1</sup>	9.1	9,900
United Kingdom <sup>1 2 3</sup>	3.1	21,400
United States <sup>1</sup>	5.4	30,300
<b>OECD average</b>	<b>4.6</b>	<b>26,400</b>
<b>EU-27 average</b>	<b>4.5</b>	<b>23,400</b>
<b>EU-15 average</b>	<b>3.4</b>	<b>28,700</b>
<b>EURO area average</b>	<b>4.1</b>	<b>25,800</b>
<b>BR(I)C average</b>	<b>3.1</b>	<b>6,700</b>

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2 Member of European Union - EU-27

3 Member of European Union - EU-15

4 Member of EURO

5 Brazil Russia China ('BR(I)C' country)

6 Provided funds for a new business in the past three years

7 Exchange rate Euro to US\$: 0.798

TABLE N - AGE OF EARLY STAGE ENTREPRENEURS

	Early stage entrepreneurs aged 18-24yrs As percentage of adults in this age category	Early stage entrepreneurs aged 25-34yrs As percentage of adults in this age category	Early stage entrepreneurs aged 35-44yrs As percentage of adults in this age category	Early stage entrepreneurs aged 45-54yrs As percentage of adults in this age category	Early stage entrepreneurs aged 55-64yrs As percentage of adults in this age category	Early stage entrepreneurs aged 18-24yrs Percentage of all early stage entrepreneurs	Early stage entrepreneurs aged 25-34yrs Percentage of all early stage entrepreneurs	Early stage entrepreneurs aged 35-44yrs Percentage of all early stage entrepreneurs	Early stage entrepreneurs aged 45-54yrs Percentage of all early stage entrepreneurs	Early stage entrepreneurs aged 55-64yrs Percentage of all early stage entrepreneurs
Austria <sup>1 2 3 4</sup>	7.1	12.5	12.2	9.6	4.8	10	26	30	25	9
Belgium <sup>1 2 3 4</sup>	1.8	3.9	5.8	9.6	2.9	5	16	26	43	11
Brazil <sup>5</sup>	14.2	19.2	18.7	12.1	8.3	18	34	27	14	7
Chile <sup>1</sup>	18.2	26.1	28.2	20.0	13.4	15	30	32	16	7
China <sup>5</sup>	12.4	20.1	15.4	8.8	6.0	15	30	33	15	8
Denmark <sup>1 2 3</sup>	5.9	6.7	5.2	6.7	2.3	16	24	22	29	9
Estonia <sup>1 2 4</sup>	16.6	22.1	17.2	10.3	4.2	18	36	25	15	6
Finland <sup>1 2 3 4</sup>	4.0	9.4	6.9	6.2	3.2	9	32	23	23	13
France <sup>1 2 3 4</sup>	3.2	8.5	6.4	4.9	1.8	8	35	29	35	7
Germany <sup>1 2 3 4</sup>	3.7	7.9	8.5	3.1	3.2	9	28	36	15	12
Greece <sup>1 2 3 4</sup>	3.0	9.6	7.9	5.3	4.9	7	36	27	16	13
Hungary <sup>1 2</sup>	9.7	9.8	10.8	9.4	6.5	14	24	27	20	15
Ireland <sup>1 2 3 4</sup>	<b>4.5</b>	<b>7.9</b>	<b>4.8</b>	<b>8.1</b>	<b>4.5</b>	<b>12</b>	<b>34</b>	<b>18</b>	<b>25</b>	<b>11</b>
Israel <sup>1</sup>	5.5	8.9	7.0	6.4	3.4	16	35	23	18	9
Italy <sup>1 2 3 4</sup>	2.7	8.2	4.4	3.3	2.5	7	37	26	18	11
Japan <sup>1</sup>	3.8	4.8	3.5	4.5	3.4	12	25	21	23	21
Korea <sup>1</sup>	1.2	5.7	8.8	8.5	6.1	2	19	34	31	14
Latvia <sup>2</sup>	11.8	22.1	17.7	10.1	2.9	14	37	28	17	4
Lithuania <sup>2</sup>	7.7	11.9	7.1	4.1	2.3	19	37	23	14	6
Mexico <sup>1</sup>	10.1	13.9	12.9	12.0	10.2	18	31	25	17	9
Netherlands <sup>1 2 3 4</sup>	7.4	11.8	13.7	11.9	5.2	10	22	32	26	10
Norway <sup>1</sup>	3.0	7.9	9.2	5.5	6.9	7	24	32	18	19
Poland <sup>1 2</sup>	7.0	15.4	9.2	6.5	6.9	11	41	19	15	14
Portugal <sup>1 2 3 4</sup>	6.4	10.6	8.1	7.2	4.6	12	33	25	20	10
Romania <sup>2</sup>	10.1	13.2	10.2	7.7	2.6	19	37	21	18	4
Russia <sup>5</sup>	4.3	6.7	4.1	4.7	1.1	16	36	19	24	5
Slovakia <sup>1 2 4</sup>	12.8	13.9	9.9	10.3	3.5	19	34	20	21	6
Slovenia <sup>1 2 4</sup>	4.5	7.6	7.9	3.8	2.7	10	31	32	16	10
Spain <sup>1 2 3 4</sup>	3.4	7.9	6.6	5.5	2.9	7	33	30	21	8
Sweden <sup>1 2 3</sup>	5.1	8.1	7.1	6.3	5.1	13	26	24	21	16
Switzerland <sup>1</sup>	2.9	4.9	10.0	5.5	4.7	6	17	39	22	15
Turkey <sup>1</sup>	6.6	19.2	14.5	9.0	4.4	9	45	28	14	5
United Kingdom <sup>1 2 3</sup>	7.1	10.5	12.8	8.0	5.6	13	24	32	19	11
United States <sup>1</sup>	10.1	14.1	16.5	12.4	10.2	12	23	27	23	15
OECD average	<b>6.3</b>	<b>10.6</b>	<b>9.9</b>	<b>7.9</b>	<b>5.0</b>	<b>11</b>	<b>29</b>	<b>27</b>	<b>21</b>	<b>11</b>
EU-27 average	<b>6.6</b>	<b>10.9</b>	<b>9.1</b>	<b>7.2</b>	<b>3.9</b>	<b>12</b>	<b>31</b>	<b>26</b>	<b>21</b>	<b>10</b>
EU-15 average	<b>4.7</b>	<b>8.8</b>	<b>7.9</b>	<b>6.8</b>	<b>3.8</b>	<b>10</b>	<b>29</b>	<b>27</b>	<b>23</b>	<b>11</b>
EURO area average	<b>5.8</b>	<b>10.1</b>	<b>8.6</b>	<b>7.1</b>	<b>3.6</b>	<b>10</b>	<b>31</b>	<b>27</b>	<b>22</b>	<b>10</b>
BRIC average	<b>10.3</b>	<b>15.3</b>	<b>12.8</b>	<b>8.5</b>	<b>5.1</b>	<b>16</b>	<b>33</b>	<b>26</b>	<b>18</b>	<b>6</b>

Numbers are rounded to whole numbers, so in some instances may not sum to 100.

<sup>1</sup> Member of OECD

<sup>2</sup> Member of European Union - EU-27

<sup>3</sup> Member of European Union - EU-15

<sup>4</sup> Member of EU10

<sup>5</sup> Brazil Russia China (BRIC) country

TABLE 0 - AGE OF ESTABLISHED OWNER MANAGERS

	Established owner managers aged 18-24yrs As percentage of all adults in this age category	Established owner managers aged 25-34yrs As percentage of all adults in this age category	Established owner managers aged 35-44yrs As percentage of all adults in this age category	Established owner managers aged 45-54yrs As percentage of all adults in this age category	Established owner managers aged 55-64yrs As percentage of all adults in this age category	Established owner managers aged 18-24yrs Percentage of all established owner managers	Established owner managers aged 25-34yrs Percentage of all established owner managers	Established owner managers aged 35-44yrs Percentage of all established owner managers	Established owner managers aged 45-54yrs Percentage of all established owner managers	Established owner managers aged 55-64yrs Percentage of all established owner managers
Austria <sup>1,2,3,4</sup>	0.5	3.8	7.6	12.6	10.3	1	10	23	41	25
Belgium <sup>1,2,3,4</sup>	n/a	0.7	4.2	10.4	8.4	n/a	3	19	47	31
Brazil <sup>5</sup>	2.8	11.2	20.6	23.9	21.3	4	20	30	29	17
Chile <sup>1</sup>	0.6	4.9	7.6	11.4	20.2	1	16	25	26	31
China <sup>5</sup>	3.7	9.7	16.8	14.6	13.7	4	15	37	26	18
Denmark <sup>1,2,3</sup>	0.3	2.0	4.6	5.1	3.9	1	34	30	11	23
Estonia <sup>1,2,4</sup>	1.0	6.0	7.9	11.5	8.3	2	19	23	33	22
Finland <sup>1,2,3,4</sup>	0.7	3.6	12.6	9.8	10.8	1	9	31	27	31
France <sup>1,2,3,4</sup>	n/a	2.7	2.9	5.7	3.7	n/a	17	21	17	22
Germany <sup>1,2,3,4</sup>	0.4	3.6	5.2	7.1	6.1	1	14	23	37	25
Greece <sup>1,2,3,4</sup>	2.3	8.6	18.7	18.6	11.0	3	17	34	30	15
Hungary <sup>1,2</sup>	1.2	5.2	10.4	12.2	9.5	2	15	29	29	25
Ireland <sup>1,2,3,4</sup>	<b>1.2</b>	<b>4.7</b>	<b>9.4</b>	<b>13.3</b>	<b>14.7</b>	<b>2</b>	<b>15</b>	<b>26</b>	<b>31</b>	<b>26</b>
Israel <sup>1</sup>	0.6	3.3	4.8	4.1	4.1	3	22	28	30	18
Italy <sup>1,2,3,4</sup>	0.9	3.1	4.7	3.5	3.0	3	18	36	25	18
Japan <sup>1</sup>	n/a	3.9	4.4	8.5	10.8	n/a	13	17	28	42
Korea <sup>1</sup>	0.4	1.4	10.3	19.8	11.6	1	3	27	50	19
Latvia <sup>2</sup>	2.7	6.3	11.5	9.3	8.7	5	18	31	26	20
Lithuania <sup>2</sup>	0.9	5.2	12.2	13.2	7.3	2	13	32	38	15
Mexico <sup>1</sup>	1.1	2.5	6.6	8.1	7.7	5	14	33	29	18
Netherlands <sup>1,2,3,4</sup>	1.4	7.1	12.4	12.9	9.9	2	14	31	31	22
Norway <sup>1</sup>	0.3	3.4	7.5	8.0	7.9	1	12	30	30	26
Poland <sup>1,2</sup>	1.7	6.2	9.5	5.9	4.8	5	26	32	21	16
Portugal <sup>1,2,3,4</sup>	0.4	4.4	8.0	7.8	9.6	1	17	30	26	26
Romania <sup>2</sup>	1.1	5.0	2.8	5.8	3.8	5	33	14	33	15
Russia <sup>5</sup>	0.2	1.7	3.4	3.0	1.4	1	20	33	33	13
Slovakia <sup>1,2,4</sup>	0.5	5.6	10.1	7.0	7.2	1	22	34	23	21
Slovenia <sup>1,2,4</sup>	0.8	2.6	7.5	10.0	5.8	2	10	29	40	20
Spain <sup>1,2,3,4</sup>	0.9	4.3	9.9	13.5	12.4	1	12	29	34	24
Sweden <sup>1,2,3</sup>	0.9	2.1	5.2	7.3	9.7	3	8	22	30	37
Switzerland <sup>1</sup>	n/a	1.5	10.5	12.8	13.9	n/a	4	29	36	31
Turkey <sup>1</sup>	3.0	7.8	12.5	12.2	5.9	6	26	33	26	9
United Kingdom <sup>1,2,3</sup>	n/a	3.1	5.4	8.3	13.6	n/a	10	20	29	41
United States <sup>1</sup>	0.9	5.3	9.1	12.7	12.4	1	13	23	35	27
OECD average	<b>1.0</b>	<b>4.1</b>	<b>8.2</b>	<b>10.1</b>	<b>9.2</b>	<b>2</b>	<b>14</b>	<b>27</b>	<b>32</b>	<b>25</b>
EU-27 average	<b>1.0</b>	<b>4.4</b>	<b>8.3</b>	<b>9.6</b>	<b>8.3</b>	<b>2</b>	<b>15</b>	<b>27</b>	<b>32</b>	<b>24</b>
EU-15 average	<b>0.9</b>	<b>3.8</b>	<b>7.9</b>	<b>9.7</b>	<b>7.9</b>	<b>2</b>	<b>13</b>	<b>27</b>	<b>33</b>	<b>26</b>
EURO area average	<b>0.9</b>	<b>4.3</b>	<b>8.6</b>	<b>10.3</b>	<b>8.7</b>	<b>2</b>	<b>14</b>	<b>28</b>	<b>33</b>	<b>23</b>
BRIC average	<b>2.2</b>	<b>7.5</b>	<b>13.6</b>	<b>13.8</b>	<b>12.1</b>	<b>3</b>	<b>18</b>	<b>33</b>	<b>29</b>	<b>16</b>

Numbers are rounded to whole numbers, so in some instances may not sum to 100.

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2 Member of European Union - EU-27  
3 Member of European Union - EU-15

4 Member of EURO  
5 Brazil Russia China (BRIC) country

TABLE P - GROWTH ASPIRATIONS OF EARLY STAGE ENTREPRENEURS

	Any jobs now or any jobs expected in five years Percentage in adult population	Expect 20 or more jobs within five years Percentage in adult population	Any jobs now or any jobs expected Percentage of all early stage entrepreneurs	Expect 10 or more jobs within five years <sup>6</sup> Percentage of all early stage entrepreneurs	Expect 20 or more jobs within five years Percentage of all early stage entrepreneurs
Austria <sup>1 2 3 4</sup>	5.7	0.4	60	8	4
Belgium <sup>1 2 3 4</sup>	3.9	0.2	74	17	4
Brazil <sup>5</sup>	8.6	0.7	56	8	4
Chile <sup>1</sup>	18.6	2.1	82	24	9
China <sup>5</sup>	10.4	1.7	81	14	13
Denmark <sup>1 2 3</sup>	4.2	0.7	79	18	14
Estonia <sup>1 2 4</sup>	11.6	1.6	81	24	11
Finland <sup>1 2 3 4</sup>	3.7	0.4	62	14	8
France <sup>1 2 3 4</sup>	4.3	0.4	83	22	9
Germany <sup>1 2 3 4</sup>	3.9	0.6	73	22	11
Greece <sup>1 2 3 4</sup>	4.0	0.2	62	8	4
Hungary <sup>1 2</sup>	7.5	1.6	81	23	17
<b>Ireland <sup>1 2 3 4</sup></b>	<b>4.5</b>	<b>0.9</b>	<b>73</b>	<b>26</b>	<b>15</b>
Israel <sup>1</sup>	3.5	1.0	54	18	15
Italy <sup>1 2 3 4</sup>	3.2	0.3	73	7	6
Japan <sup>1</sup>	2.9	0.6	73	27	16
Korea <sup>1</sup>	5.9	1.2	89	22	18
Latvia <sup>2</sup>	11.3	3.1	84	40	23
Lithuania <sup>2</sup>	5.5	1.4	82	35	22
Mexico <sup>1</sup>	9.8	0.6	81	12	5
Netherlands <sup>1 2 3 4</sup>	6.3	0.7	61	9	7
Norway <sup>1</sup>	4.7	0.4	70	9	6
Poland <sup>1 2</sup>	7.5	1.0	80	16	10
Portugal <sup>1 2 3 4</sup>	5.6	0.5	73	16	7
Romania <sup>2</sup>	7.7	1.6	84	36	17
Russia <sup>5</sup>	3.2	0.4	73	20	9
Slovakia <sup>1 2 4</sup>	7.6	1.3	75	20	12
Slovenia <sup>1 2 4</sup>	4.1	0.7	76	19	12
Spain <sup>1 2 3 4</sup>	3.4	0.2	60	6	3
Sweden <sup>1 2 3</sup>	4.2	0.3	65	10	4
Switzerland <sup>1</sup>	4.5	0.4	76	9	7
Turkey <sup>1</sup>	9.9	2.8	81	31	23
United Kingdom <sup>1 2 3</sup>	5.7	0.9	63	17	10
United States <sup>1</sup>	9.6	1.7	75	21	13
<b>OECD average</b>	<b>6.1</b>	<b>0.8</b>	<b>73</b>	<b>17</b>	<b>10</b>
<b>EU-27 average</b>	<b>5.7</b>	<b>0.9</b>	<b>73</b>	<b>19</b>	<b>10</b>
<b>EU-15 average</b>	<b>4.5</b>	<b>0.5</b>	<b>69</b>	<b>14</b>	<b>8</b>
<b>EURO area average</b>	<b>5.1</b>	<b>0.6</b>	<b>70</b>	<b>15</b>	<b>8</b>
<b>BR(I)C average</b>	<b>7.4</b>	<b>0.9</b>	<b>70</b>	<b>14</b>	<b>9</b>

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3 Member of European Union - EU-15

4 Member of EURO

5 Brazil Russia China ('BR(I)C' country)

6 If the business is already operational, jobs 5 years from now; in which case an extra requirement is that job growth is at least 50%.

**TABLE Q - GROWTH ASPIRATIONS OF EARLY STAGE ENTREPRENEURS AND ESTABLISHED OWNER MANAGERS**

	<b>Expect 10 or more jobs within 5 years<sup>6</sup></b> Percentage of all early stage entrepreneurs	<b>Expect 10 or more jobs within 5 years<sup>6</sup></b> Percentage of all established owner managers
Austria <sup>1 2 3 4</sup>	8	1
Belgium <sup>1 2 3 4</sup>	17	0
Brazil <sup>5</sup>	8	2
Chile <sup>1</sup>	24	5
China <sup>5</sup>	14	3
Denmark <sup>1 2 3</sup>	18	3
Estonia <sup>1 2 4</sup>	24	5
Finland <sup>1 2 3 4</sup>	14	3
France <sup>1 2 3 4</sup>	22	0
Germany <sup>1 2 3 4</sup>	22	4
Greece <sup>1 2 3 4</sup>	8	1
Hungary <sup>1 2</sup>	23	2
<b>Ireland <sup>1 2 3 4</sup></b>	<b>26</b>	<b>5</b>
Israel <sup>1</sup>	18	4
Italy <sup>1 2 3 4</sup>	7	4
Japan <sup>1</sup>	27	6
Korea <sup>1</sup>	22	6
Latvia <sup>2</sup>	40	16
Lithuania <sup>2</sup>	35	9
Mexico <sup>1</sup>	12	7
Netherlands <sup>1 2 3 4</sup>	9	2
Norway <sup>1</sup>	9	2
Poland <sup>1 2</sup>	16	6
Portugal <sup>1 2 3 4</sup>	16	1
Romania <sup>2</sup>	36	20
Russia <sup>5</sup>	20	3
Slovakia <sup>1 2 4</sup>	20	3
Slovenia <sup>1 2 4</sup>	19	7
Spain <sup>1 2 3 4</sup>	6	1
Sweden <sup>1 2 3</sup>	10	7
Switzerland <sup>1</sup>	9	3
Turkey <sup>1</sup>	31	15
United Kingdom <sup>1 2 3</sup>	17	4
United States <sup>1</sup>	21	5
<b>OECD average</b>	<b>17</b>	<b>4</b>
<b>EU-27 average</b>	<b>19</b>	<b>5</b>
<b>EU-15 average</b>	<b>14</b>	<b>3</b>
<b>EURO area average</b>	<b>15</b>	<b>3</b>
<b>BR(I)C average</b>	<b>14</b>	<b>3</b>

1 Member of OECD

2 Member of European Union - EU-27

3 Member of European Union - EU-15

4 Member of EURO

5 Brazil Russia China ('BR(I)C' country)

6 If the business is already operational, jobs 5 years from now; in which case an extra requirement is that job growth is at least 50%.



TABLE R - INTERNATIONAL ORIENTATION OF EARLY STAGE ENTREPRENEURS

	More than 50% of customers outside country Percentage in adult population	More than 50% of customers outside country Percentage of all early stage entrepreneurs	No customers outside country Percentage of all early stage entrepreneurs	1-25% customers outside country Percentage of all early stage entrepreneurs	26-75% customers outside country Percentage of all early stage entrepreneurs	76-100% customers outside country Percentage of all early stage entrepreneurs
Austria <sup>1 2 3 4</sup>	1.6	17	34	39	15	11
Belgium <sup>1 2 3 4</sup>	0.4	7	40	52	3	5
Brazil <sup>5</sup>	0.0	0	99	1	0	0
Chile <sup>1</sup>	1.0	4	31	62	5	3
China <sup>5</sup>	0.1	1	80	18	2	0
Denmark <sup>1 2 3</sup>	0.9	17	58	21	7	14
Estonia <sup>1 2 4</sup>	2.4	17	33	37	19	11
Finland <sup>1 2 3 4</sup>	0.9	14	55	24	11	10
France <sup>1 2 3 4</sup>	0.9	17	41	29	21	9
Germany <sup>1 2 3 4</sup>	0.2	3	46	44	7	2
Greece <sup>1 2 3 4</sup>	0.8	13	51	28	12	9
Hungary <sup>1 2</sup>	1.2	13	44	38	12	7
<b>Ireland <sup>1 2 3 4</sup></b>	<b>1.4</b>	<b>22</b>	<b>34</b>	<b>38</b>	<b>14</b>	<b>14</b>
Israel <sup>1</sup>	0.9	13	39	38	13	10
Italy <sup>1 2 3 4</sup>	0.5	12	58	24	7	10
Japan <sup>1</sup>	0.3	9	46	39	8	7
Korea <sup>1</sup>	1.1	16	45	32	13	10
Latvia <sup>2</sup>	2.9	21	22	46	18	14
Lithuania <sup>2</sup>	1.7	25	28	31	19	21
Mexico <sup>1</sup>	0.2	2	85	11	5	0
Netherlands <sup>1 2 3 4</sup>	0.9	9	54	32	6	8
Norway <sup>1</sup>	0.6	8	69	20	4	8
Poland <sup>1 2</sup>	0.7	8	27	54	14	5
Portugal <sup>1 2 3 4</sup>	1.2	15	28	49	14	9
Romania <sup>2</sup>	2.7	30	22	39	26	13
Russia <sup>5</sup>	0.1	3	89	6	2	2
Slovakia <sup>1 2 4</sup>	1.4	13	35	44	15	5
Slovenia <sup>1 2 4</sup>	1.2	22	39	29	16	16
Spain <sup>1 2 3 4</sup>	0.6	10	74	11	7	7
Sweden <sup>1 2 3</sup>	0.8	12	60	18	14	8
Switzerland <sup>1</sup>	0.7	12	23	52	17	8
Turkey <sup>1</sup>	1.2	10	62	23	9	6
United Kingdom <sup>1 2 3</sup>	0.9	10	42	45	9	4
United States <sup>1</sup>	0.9	7	25	62	8	4
<b>OECD average</b>	<b>0.9</b>	<b>11</b>	<b>46</b>	<b>36</b>	<b>11</b>	<b>8</b>
<b>EU-27 average</b>	<b>1.2</b>	<b>15</b>	<b>42</b>	<b>35</b>	<b>13</b>	<b>10</b>
<b>EU-15 average</b>	<b>0.9</b>	<b>13</b>	<b>48</b>	<b>32</b>	<b>10</b>	<b>9</b>
<b>EURO area average</b>	<b>1.0</b>	<b>14</b>	<b>45</b>	<b>34</b>	<b>12</b>	<b>9</b>
<b>BR(I)C average</b>	<b>0.1</b>	<b>1</b>	<b>89</b>	<b>8</b>	<b>1</b>	<b>1</b>

Numbers are rounded to whole numbers, so in some instances may not sum up to 100.

1 Member of OECD

2 Member of European Union - EU-27

3 Member of European Union - EU-15

4 Member of EURO

5 Brazil Russia China ('BR(I)C' country)

**TABLE S - INTERNATIONAL ORIENTATION OF ESTABLISHED OWNER MANAGERS**

	<b>More than 50% of customers outside country</b> Percentage in adult population	<b>More than 50% of customers outside country</b> Percentage of all established owner managers	<b>No customers outside country</b> Percentage of all established owner managers	<b>1-25% customers outside country</b> Percentage of all established owner managers	<b>26-75% customers outside country</b> Percentage of all established owner managers	<b>76-100% customers outside country</b> Percentage of all established owner managers
Austria <sup>1 2 3 4</sup>	0.7	10	37	47	11	5
Belgium <sup>1 2 3 4</sup>	0.3	6	44	44	7	5
Brazil <sup>5</sup>	0.0	0	99	1	0	0
Chile <sup>1</sup>	0.2	3	36	58	2	3
China <sup>5</sup>	0.1	0	86	13	1	0
Denmark <sup>1 2 3</sup>	0.2	6	38	49	6	6
Estonia <sup>1 2 4</sup>	1.1	15	33	49	7	10
Finland <sup>1 2 3 4</sup>	0.4	5	57	33	8	1
France <sup>1 2 3 4</sup>	0.3	9	51	36	8	5
Germany <sup>1 2 3 4</sup>	0.5	10	35	49	9	6
Greece <sup>1 2 3 4</sup>	0.6	5	60	32	6	3
Hungary <sup>1 2</sup>	0.6	8	45	44	6	5
<b>Ireland<sup>1 2 3 4</sup></b>	<b>1.3</b>	<b>16</b>	<b>46</b>	<b>33</b>	<b>10</b>	<b>10</b>
Israel <sup>1</sup>	0.5	12	38	43	7	12
Italy <sup>1 2 3 4</sup>	0.4	13	40	41	7	12
Japan <sup>1</sup>	0.1	1	71	26	2	1
Korea <sup>1</sup>	0.9	10	45	38	11	6
Latvia <sup>2</sup>	1.8	22	23	45	18	14
Lithuania <sup>2</sup>	0.9	12	40	40	10	9
Mexico <sup>1</sup>	0.2	3	73	18	9	0
Netherlands <sup>1 2 3 4</sup>	0.7	7	54	33	9	3
Norway <sup>1</sup>	0.5	8	71	19	6	4
Poland <sup>1 2</sup>	0.4	7	46	44	6	4
Portugal <sup>1 2 3 4</sup>	0.5	9	36	55	1	8
Romania <sup>2</sup>	0.7	18	22	42	23	13
Russia <sup>5</sup>	0.1	3	96	1	0	3
Slovakia <sup>1 2 4</sup>	0.9	14	43	35	16	6
Slovenia <sup>1 2 4</sup>	0.8	13	29	46	16	8
Spain <sup>1 2 3 4</sup>	0.5	5	81	12	3	4
Sweden <sup>1 2 3</sup>	0.3	6	63	25	9	3
Switzerland <sup>1</sup>	0.7	8	14	62	21	3
Turkey <sup>1</sup>	0.3	3	65	30	2	3
United Kingdom <sup>1 2 3</sup>	0.4	6	41	51	6	2
United States <sup>1</sup>	0.3	4	31	63	3	3
<b>OECD average</b>	<b>0.5</b>	<b>8</b>	<b>47</b>	<b>40</b>	<b>8</b>	<b>5</b>
<b>EU-27 average</b>	<b>0.7</b>	<b>10</b>	<b>44</b>	<b>40</b>	<b>9</b>	<b>7</b>
<b>EU-15 average</b>	<b>0.5</b>	<b>8</b>	<b>49</b>	<b>39</b>	<b>7</b>	<b>5</b>
<b>EURO area average</b>	<b>0.6</b>	<b>9</b>	<b>46</b>	<b>39</b>	<b>8</b>	<b>6</b>
<b>BR(I)C average</b>	<b>0.04</b>	<b>0.04</b>	<b>94</b>	<b>5</b>	<b>0</b>	<b>1</b>

Numbers are rounded to whole numbers, so in some instances may not sum up to 100.

1 Member of OECD

2 Member of European Union - EU-27

3 Member of European Union - EU-15

4 Member of EURO

5 Brazil Russia China ('BR(I)C' country)

TABLE T - INNOVATIVENESS OF EARLY STAGE ENTREPRENEURS

	Product/service is new to no customers Percentage of all early stage entrepreneurs	Product/service is new to some customers Percentage of all early stage entrepreneurs	Product/service is new to all customers Percentage of all early stage entrepreneurs	New business has many competitors Percentage of all early stage entrepreneurs	New business has few competitors Percentage of all early stage entrepreneurs	New business has no competitors Percentage of all early stage entrepreneurs	Business uses established technology (5+ years) Percentage of all early stage entrepreneurs	Business uses new technology (1-5 years) Percentage of all early stage entrepreneurs	Business uses the very latest technology (less than 1 year) Percentage of all early stage entrepreneurs
Austria <sup>1 2 3 4</sup>	52	40	8	50	45	6	79	16	6
Belgium <sup>1 2 3 4</sup>	47	38	15	50	32	17	69	21	10
Brazil <sup>5</sup>	99	1	0	59	33	8	100	0	0
Chile <sup>1</sup>	12	40	48	38	52	10	59	27	13
China <sup>5</sup>	37	42	20	70	24	6	79	12	9
Denmark <sup>1 2 3</sup>	39	35	26	42	43	15	43	16	3
Estonia <sup>1 2 4</sup>	49	38	13	41	47	12	70	19	12
Finland <sup>1 2 3 4</sup>	56	28	16	58	38	3	77	15	8
France <sup>1 2 3 4</sup>	31	47	23	46	45	9	66	21	13
Germany <sup>1 2 3 4</sup>	60	35	5	47	46	7	70	15	14
Greece <sup>1 2 3 4</sup>	60	25	15	60	36	4	55	35	10
Hungary <sup>1 2</sup>	64	26	10	58	28	14	80	14	6
Ireland <sup>1 2 3 4</sup>	51	26	23	42	38	20	69	23	8
Israel <sup>1</sup>	51	27	22	50	38	12	58	21	21
Italy <sup>1 2 3 4</sup>	21	41	38	67	29	3	56	24	20
Japan <sup>1</sup>	55	26	19	69	28	4	68	21	11
Korea <sup>1</sup>	48	41	11	63	29	8	79	11	10
Latvia <sup>2</sup>	51	36	13	50	40	10	77	17	6
Lithuania <sup>2</sup>	69	19	12	53	32	15	75	14	10
Mexico <sup>1</sup>	48	33	19	64	33	3	84	9	8
Netherlands <sup>1 2 3 4</sup>	58	21	21	55	36	10	78	15	8
Norway <sup>1</sup>	72	16	12	50	36	21	73	21	7
Poland <sup>1 2</sup>	28	45	27	61	25	14	68	28	5
Portugal <sup>1 2 3 4</sup>	57	29	14	45	43	12	65	26	9
Romania <sup>2</sup>	52	35	13	49	41	10	53	30	16
Russia <sup>5</sup>	73	15	13	68	26	5	89	8	3
Slovakia <sup>1 2 4</sup>	48	33	19	61	31	8	66	17	16
Slovenia <sup>1 2 4</sup>	51	34	15	41	47	12	69	25	6
Spain <sup>1 2 3 4</sup>	58	23	19	47	39	13	68	19	13
Sweden <sup>1 2 3</sup>	64	24	12	54	33	12	75	16	9
Switzerland <sup>1</sup>	57	34	9	44	50	6	76	13	12
Turkey <sup>1</sup>	40	29	31	66	27	7	77	19	5
United Kingdom <sup>1 2 3</sup>	62	24	14	37	55	8	76	18	6
United States <sup>1</sup>	53	31	16	40	45	15	73	20	7
OECD average	50	32	19	52	38	10	71	19	10
EU-27 average	51	32	17	51	39	11	70	20	10
EU-15 average	51	31	18	50	40	10	70	20	10
EURO area average	50	33	17	51	40	10	68	21	11
BR(I)C average	70	19	11	66	28	7	90	7	4

Numbers are rounded to

whole numbers, so in some

instances may not sum to 100.

<sup>1</sup> Member of OECD<sup>2</sup> Member of European Union - EU-27<sup>3</sup> Member of European Union - EU-15<sup>4</sup> Member of EURO<sup>5</sup> Brazil Russia China (BR(I)C country)

TABLE U - INNOVATIVENESS OF ESTABLISHED OWNER MANAGERS

	Product/service is new to no customers Percentage of all established owner managers	Product/service is new to some customers Percentage of all established owner managers	Product/service is new to all customers Percentage of all established owner managers	New business has many competitors Percentage of all established owner managers	New business has few competitors Percentage of all established owner managers	New business has no competitors Percentage of all established owner managers	Business uses established technology (5+ years) Percentage of all established owner managers	Business uses new technology (1-5 years) Percentage of all established owner managers	Business uses the very latest technology (less than 1 year) Percentage of all established owner managers
Austria <sup>1 2 3 4</sup>	71	22	7	68	29	4	97	3	0
Belgium <sup>1 2 3 4</sup>	89	9	3	67	31	1	91	4	5
Brazil <sup>5</sup>	99	1	0	69	25	5	100	0	0
Chile <sup>1</sup>	20	38	42	54	40	6	81	13	6
China <sup>5</sup>	45	31	24	71	24	5	89	8	3
Denmark <sup>1 2 3</sup>	46	33	21	46	42	12	91	6	3
Estonia <sup>1 2 4</sup>	70	21	9	56	37	7	87	10	3
Finland <sup>1 2 3 4</sup>	69	19	12	72	23	5	86	4	10
France <sup>1 2 3 4</sup>	75	17	8	63	32	5	83	9	8
Germany <sup>1 2 3 4</sup>	81	14	5	72	25	2	95	4	1
Greece <sup>1 2 3 4</sup>	71	22	7	58	33	8	86	12	2
Hungary <sup>1 2</sup>	78	15	7	68	25	7	95	5	0
Ireland <sup>1 2 3 4</sup>	78	16	5	69	27	5	87	11	2
Israel <sup>1</sup>	74	10	16	78	16	6	80	17	4
Italy <sup>1 2 3 4</sup>	20	38	41	73	25	2	74	20	6
Japan <sup>1</sup>	79	14	7	65	30	5	99	1	0
Korea <sup>1</sup>	59	33	9	72	22	6	89	8	2
Latvia <sup>2</sup>	70	22	8	62	35	4	91	7	1
Lithuania <sup>2</sup>	78	10	12	71	23	6	85	11	4
Mexico <sup>1</sup>	68	26	6	59	41	0	93	6	1
Netherlands <sup>1 2 3 4</sup>	71	20	9	68	28	4	89	7	4
Norway <sup>1</sup>	83	16	1	80	12	8	95	3	2
Poland <sup>1 2</sup>	48	38	14	73	21	5	83	14	2
Portugal <sup>1 2 3 4</sup>	81	17	2	70	26	4	90	9	1
Romania <sup>2</sup>	52	31	17	59	27	13	62	26	11
Russia <sup>5</sup>	88	5	7	74	19	7	94	6	0
Slovakia <sup>1 2 4</sup>	71	16	14	75	20	5	76	12	13
Slovenia <sup>1 2 4</sup>	67	23	10	59	35	6	87	8	5
Spain <sup>1 2 3 4</sup>	85	10	4	70	23	7	80	13	7
Sweden <sup>1 2 3</sup>	75	21	5	57	37	6	90	8	1
Switzerland <sup>1</sup>	69	20	10	66	28	6	96	4	0
Turkey <sup>1</sup>	55	24	21	80	17	2	90	9	1
United Kingdom <sup>1 2 3</sup>	74	19	7	63	33	4	88	11	1
United States <sup>1</sup>	74	20	6	52	42	5	90	9	1
OECD average	68	21	11	66	29	5	88	9	3
EU-27 average	69	21	10	65	29	6	86	10	4
EU-15 average	71	20	10	65	30	5	88	9	4
EURO area average	71	19	10	67	28	5	86	9	5
BR(I)C average	78	12	10	71	23	6	95	4	1

Numbers are rounded to whole numbers, so in some instances may not sum to 100.

1 Member of OECD  
2 Member of European Union - EU-27  
3 Member of European Union - EU-15

4 Member of EURO  
5 Brazil Russia China (BR(I)C country)

TABLE V - SECTOR OF ACTIVITY OF EARLY STAGE ENTREPRENEURS AND ESTABLISHED OWNER MANAGERS

	Extractive sectors Percentage of all early stage entrepreneurs	Transformative sectors <sup>a</sup> Percentage of all early stage entrepreneurs	Business sectors <sup>7</sup> Percentage of all early stage entrepreneurs	Consumer sectors <sup>a</sup> Percentage of all early stage entrepreneurs	Extractive sectors Percentage of all established owner managers	Transformative sectors <sup>a</sup> Percentage of all established owner managers	Business sectors <sup>7</sup> Percentage of all established owner managers	Consumer sectors <sup>a</sup> Percentage of all established owner managers	High or medium technology sectors Percentage of all early stage entrepreneurs	High or medium technology sectors Percentage of all established owner managers
Austria <sup>1,2,3,4</sup>	2	11	40	47	10	17	39	34	10	10
Belgium <sup>1,2,3,4</sup>	3	26	23	48	11	28	19	42	3	0
Brazil <sup>5</sup>	2	28	14	57	3	39	12	46	2	2
Chile <sup>1</sup>	2	27	13	57	2	29	14	56	6	5
China <sup>5</sup>	4	21	3	72	19	16	3	63	2	2
Denmark <sup>1,2,3</sup>	3	20	34	42	9	18	33	40	10	11
Estonia <sup>1,2,4</sup>	6	29	27	38	12	27	30	32	8	6
Finland <sup>1,2,3,4</sup>	16	19	28	37	23	29	27	22	7	4
France <sup>1,2,3,4</sup>	5	17	33	44	14	24	36	26	11	9
Germany <sup>1,2,3,4</sup>	1	15	30	54	3	27	32	38	8	10
Greece <sup>1,2,3,4</sup>	3	20	24	52	4	25	12	59	5	2
Hungary <sup>1,2</sup>	12	26	23	38	8	31	29	32	6	8
Ireland <sup>1,2,3,4</sup>	5	19	35	41	26	23	28	24	9	6
Israel <sup>1</sup>	0	17	24	59	1	12	25	62	4	3
Italy <sup>1,2,3,4</sup>	8	25	25	43	8	28	27	36	14	5
Japan <sup>1</sup>	5	24	24	47	3	30	20	47	9	6
Korea <sup>1</sup>	4	30	19	47	4	39	11	46	8	9
Latvia <sup>2</sup>	11	36	17	37	22	32	12	34	6	4
Lithuania <sup>2</sup>	9	26	29	36	12	32	22	34	7	4
Mexico <sup>1</sup>	1	22	9	67	1	20	5	74	5	2
Netherlands <sup>1,2,3,4</sup>	4	25	28	43	14	36	22	29	5	2
Norway <sup>1</sup>	9	24	33	34	26	23	28	23	7	9
Poland <sup>1,2</sup>	7	41	18	34	16	31	22	32	3	3
Portugal <sup>1,2,3,4</sup>	5	26	24	45	5	25	23	47	4	2
Romania <sup>2</sup>	18	21	17	44	18	38	3	41	4	0
Russia <sup>5</sup>	8	34	9	48	10	25	8	57	4	0
Slovakia <sup>1,2,4</sup>	4	25	32	38	4	41	24	31	8	8
Slovenia <sup>1,2,4</sup>	4	28	42	26	5	36	35	24	14	7
Spain <sup>1,2,3,4</sup>	4	18	26	52	11	28	21	41	10	7
Sweden <sup>1,2,3</sup>	10	14	38	38	10	25	38	28	12	16
Switzerland <sup>1</sup>	5	16	34	46	9	18	35	38	11	12
Turkey <sup>1</sup>	6	28	16	50	4	36	15	45	5	1
United Kingdom <sup>1,2,3</sup>	2	23	33	42	6	28	41	25	9	4
United States <sup>1</sup>	4	22	33	41	7	27	39	27	9	9
OECD average	5	23	28	45	9	27	26	38	8	6
EU-27 average	6	23	28	42	11	29	26	34	8	6
EU-15 average	5	20	30	45	11	26	28	35	8	6
EURO area average	5	22	30	43	11	28	26	35	8	6
BRIC average	5	28	8	59	10	27	8	55	3	1

Numbers are rounded to whole numbers, so in some instances, may not sum to 100

1 Member of OECD  
2 Member of European Union - EU-27  
3 Member of European Union - EU-15  
4 Member of EURO

5 Brazil Russia China (BRIC) country

6 Includes construction, manufacturing, transport, wholesale, utilities.

7 Includes finance, insurance, real estate, all business services.

8 Includes retail, motor, lodgings, restaurants, personal services, health, education, recreation.

TABLE W - GENDER: ENTREPRENEURIAL ACTIVITY

	Men early stage entrepreneurs Percentage in male adult population	Women early stage entrepreneurs Percentage in female adult population	Men:Woman (early stage entrepreneurs) Rate as a ratio	Men established owner managers Percentage in male adult population	Women established owner managers Percentage in female adult population	Men:Women (established owner managers) Rate as a ratio
Austria <sup>1 2 3 4</sup>	11.0	8.1	1.4 : 1	9.3	5.9	1.6 : 1
Belgium <sup>1 2 3 4</sup>	7.7	2.6	2.9 : 1	6.7	3.5	1.9 : 1
Brazil <sup>5</sup>	16.2	14.7	1.1 : 1	17.4	13.1	1.3 : 1
Chile <sup>1</sup>	26.2	19.1	1.4 : 1	9.2	6.4	1.5 : 1
China <sup>5</sup>	14.7	11.0	1.3 : 1	14.3	10.6	1.4 : 1
Denmark <sup>1 2 3</sup>	7.6	3.1	2.5 : 1	4.7	2.1	2.2 : 1
Estonia <sup>1 2 4</sup>	19.1	9.7	2.0 : 1	10.6	4.2	2.5 : 1
Finland <sup>1 2 3 4</sup>	7.8	4.1	1.9 : 1	11.7	4.3	2.7 : 1
France <sup>1 2 3 4</sup>	6.4	4.0	1.6 : 1	4.3	2.2	1.9 : 1
Germany <sup>1 2 3 4</sup>	7.1	3.5	2.0 : 1	5.9	4.0	1.5 : 1
Greece <sup>1 2 3 4</sup>	8.6	4.4	2.0 : 1	17.7	6.8	2.6 : 1
Hungary <sup>1 2</sup>	12.8	5.8	2.2 : 1	12.0	4.3	2.8 : 1
<b>Ireland <sup>1 2 3 4</sup></b>	<b>8.3</b>	<b>4.0</b>	<b>2.1 : 1</b>	<b>11.8</b>	<b>4.7</b>	<b>2.5 : 1</b>
Israel <sup>1</sup>	7.6	5.5	1.4 : 1	4.7	2.9	1.6 : 1
Italy <sup>1 2 3 4</sup>	5.7	2.9	2.0 : 1	5.0	1.6	3.1 : 1
Japan <sup>1</sup>	5.9	2.1	2.8 : 1	8.0	4.2	1.9 : 1
Korea <sup>1</sup>	10.8	2.3	4.8 : 1	15.1	3.8	4.0 : 1
Latvia <sup>2</sup>	18.9	8.2	2.3 : 1	10.2	5.8	1.8 : 1
Lithuania <sup>2</sup>	9.4	4.2	2.3 : 1	12.4	4.3	2.9 : 1
Mexico <sup>1</sup>	12.2	12.1	1.0 : 1	6.0	3.4	1.8 : 1
Netherlands <sup>1 2 3 4</sup>	13.9	6.7	2.1 : 1	13.0	5.9	2.2 : 1
Norway <sup>1</sup>	9.8	3.6	2.8 : 1	7.7	3.8	2.0 : 1
Poland <sup>1 2</sup>	12.6	6.2	2.0 : 1	8.5	3.2	2.6 : 1
Portugal <sup>1 2 3 4</sup>	9.3	6.2	1.5 : 1	8.8	3.7	2.4 : 1
Romania <sup>2</sup>	13.2	5.3	2.5 : 1	6.0	1.9	3.2 : 1
Russia <sup>5</sup>	5.3	3.4	1.6 : 1	2.2	1.9	1.1 : 1
Slovakia <sup>1 2 4</sup>	13.7	6.7	2.0 : 1	9.1	3.6	2.5 : 1
Slovenia <sup>1 2 4</sup>	8.1	2.6	3.1 : 1	8.5	2.9	3.0 : 1
Spain <sup>1 2 3 4</sup>	7.4	4.0	1.8 : 1	11.1	6.4	1.7 : 1
Sweden <sup>1 2 3</sup>	8.0	4.8	1.7 : 1	7.3	3.1	2.4 : 1
Switzerland <sup>1</sup>	6.4	5.4	1.2 : 1	9.8	7.1	1.4 : 1
Turkey <sup>1</sup>	17.5	6.9	2.6 : 1	14.6	2.7	5.4 : 1
United Kingdom <sup>1 2 3</sup>	11.6	6.3	1.8 : 1	8.8	3.5	2.5 : 1
United States <sup>1</sup>	15.2	10.5	1.5 : 1	10.4	6.7	1.6 : 1
<b>OECD average</b>	<b>10.7</b>	<b>5.8</b>	<b>1.8 : 1</b>	<b>9.3</b>	<b>4.2</b>	<b>2.2 : 1</b>
<b>EU-27 average</b>	<b>10.4</b>	<b>5.2</b>	<b>2.0 : 1</b>	<b>9.3</b>	<b>4.0</b>	<b>2.3 : 1</b>
<b>EU-15 average</b>	<b>8.6</b>	<b>4.6</b>	<b>1.9 : 1</b>	<b>9.0</b>	<b>4.1</b>	<b>2.2 : 1</b>
<b>EURO area average</b>	<b>9.6</b>	<b>5.0</b>	<b>1.9 : 1</b>	<b>9.5</b>	<b>4.3</b>	<b>2.2 : 1</b>
<b>BR(I)C average</b>	<b>12.1</b>	<b>9.7</b>	<b>1.2 : 1</b>	<b>11.3</b>	<b>8.5</b>	<b>1.3 : 1</b>

1 Member of OECD

2 Member of European Union - EU-27

3 Member of European Union - EU-15

4 Member of EURO

5 Brazil Russia China ('BR(I)C' country)

TABLE X - GENDER: PERSONAL CONTEXT OF GENERAL POPULATION

	Know a recent entrepreneur <sup>6</sup> (men) Men as a percentage of all men in adult population	Know a recent entrepreneur (women) Women as a percentage of all women in adult population	Opportunities in local area <sup>7</sup> (men) Men as a percentage of all men in adult population	Opportunities in local area (women) Women as a percentage of all women in adult population	Skills & knowledge to start-up (men) Men as a percentage of all men in adult population	Skills & knowledge to start-up (women) Women as a percentage of all women in adult population	Fear of failure prevent start-up (men) Men as a percentage of all men in adult population	Fear of failure prevent start-up (women) Women as a percentage of all women in adult population
Austria <sup>1,2,3,4</sup>	42	35	53	45	58	42	38	49
Belgium <sup>1,2,3,4</sup>	22	22	37	29	46	28	43	49
Brazil <sup>5</sup>	39	29	55	50	61	47	30	41
Chile <sup>1</sup>	47	37	68	62	69	51	27	37
China <sup>5</sup>	54	50	34	30	42	33	35	37
Denmark <sup>1,2,3</sup>	37	30	47	42	40	22	38	46
Estonia <sup>1,2,4</sup>	41	34	51	40	52	35	37	51
Finland <sup>1,2,3,4</sup>	45	39	54	56	40	28	32	47
France <sup>1,2,3,4</sup>	37	31	39	36	42	29	45	48
Germany <sup>1,2,3,4</sup>	27	22	39	33	45	29	45	53
Greece <sup>1,2,3,4</sup>	31	24	15	11	56	44	70	75
Hungary <sup>1,2</sup>	32	24	11	11	50	30	44	48
Ireland <sup>1,2,3,4</sup>	44	31	28	23	54	36	37	46
Israel <sup>1</sup>	32	25	32	30	37	22	39	45
Italy <sup>1,2,3,4</sup>	24	24	22	17	35	25	55	58
Japan <sup>1</sup>	16	12	7	6	13	5	47	47
Korea <sup>1</sup>	33	24	17	8	37	16	40	41
Latvia <sup>1</sup>	35	30	32	34	50	38	31	45
Lithuania <sup>2</sup>	37	29	31	29	50	30	40	51
Mexico <sup>1</sup>	44	40	47	43	68	57	30	35
Netherlands <sup>1,2,3,4</sup>	40	30	38	30	54	31	36	43
Norway <sup>1</sup>	42	28	71	57	45	23	34	37
Poland <sup>1,2</sup>	43	39	18	23	65	43	53	64
Portugal <sup>1,2,3,4</sup>	29	22	18	14	54	40	48	57
Romania <sup>2</sup>	37	24	42	31	48	29	41	49
Russia <sup>5</sup>	38	30	21	19	27	20	39	46
Slovakia <sup>1,2,4</sup>	44	41	20	16	61	38	40	56
Slovenia <sup>1,2,4</sup>	44	35	23	16	61	41	37	46
Spain <sup>1,2,3,4</sup>	34	16	16	12	56	44	48	55
Sweden <sup>1,2,3</sup>	44	38	69	63	47	26	33	45
Switzerland <sup>1</sup>	41	24	36	36	46	29	24	41
Turkey <sup>1</sup>	44	24	44	35	62	37	31	38
United Kingdom <sup>1,2,3</sup>	35	25	37	28	57	37	38	44
United States <sup>1</sup>	32	25	47	40	65	47	35	40
OECD average	37	29	36	31	51	33	40	48
EU-27 average	37	30	34	29	51	34	42	51
EU-15 average	35	28	37	31	49	33	43	51
EURO area average	36	29	32	27	51	35	44	52
BR(I)C average	43	37	37	33	43	34	35	41

1 Member of OECD

2 Member of European Union - EU-27

3 Member of European Union - EU-15

4 Member of EURO

5 Brazil Russia China (BR(I)C' country)

6 Knows someone who has started a business in the past 2 years

7 Opportunities to start a business in the next six months (July 2012-December 2012)

## APPENDIX 1: GLOBAL RESULTS

The GEM study includes a wider group of countries than those referenced in this report. GEM groups the participating countries into three levels: factor driven, efficiency driven and innovation driven. These are based on World Economic Forum's (WEF) Global Competitiveness Report, which identifies three phases of economic growth based on GDP per capita and the share of exports comprising primary goods.

The table below provides an overview of the results of the GEM 2012 research cycle which was carried out through surveying 198,000 individuals across the 69 economies involved, spanning diverse geographies and a range of development levels.

	Nascent entrepreneurship rate	New business ownership rate	Early stage entrepreneurial activity (TEA)	Owner managers of established business ownership rate
Factor-driven economies	%	%	%	%
Algeria	2	7	9	3
Angola	15	19	32	9
Botswana	17	12	28	6
Egypt	3	5	8	4
Ethiopia	6	9	15	10
Ghana	15	23	37	38
Iran	4	6	11	10
Malawi	18	20	36	11
Nigeria	22	14	35	16
Pakistan	8	3	12	4
Palestine	6	4	10	3
Uganda	10	28	36	31
Zambia	27	15	41	4
<i>average (unweighted)</i>	12	13	24	11
Efficiency-driven economies	%	%	%	%
Argentina	12	7	19	10
Barbados	10	7	17	12
Bosnia and Herzegovina	5	3	8	6
Brazil	4	11	15	15
Chile	15	8	23	8
China	5	7	13	12
Colombia	14	7	20	7
Costa Rica	10	5	15	3
Croatia	6	2	8	3
Ecuador	17	12	27	19
El Salvador	8	8	15	9
Estonia	9	5	14	7
Hungary	6	4	9	8
Latvia	9	5	13	8
Lithuania	3	4	7	8
Macedonia	4	3	7	7
Malaysia	3	4	7	7

continued over



	Nascent entrepreneurship rate	New business ownership rate	Early stage entrepreneurial activity (TEA)	Owner managers of established business ownership rate
Factor-driven economies	%	%	%	%
Mexico	8	4	12	5
Namibia	11	7	18	3
Panama	7	3	9	2
Peru	15	6	20	5
Poland	5	5	9	6
Romania	6	4	9	4
Russia	3	2	4	2
South Africa	4	3	7	2
Thailand	9	11	19	30
Trinidad & Tobago	9	7	15	7
Tunisia	2	2	5	4
Turkey	7	5	12	9
Uruguay	10	5	15	5
<i>average (unweighted)</i>	8	6	13	8
Panama	7	3	9	2
Peru	15	6	20	5
Poland	5	5	9	6
Romania	6	4	9	4
Russia	3	2	4	2
South Africa	4	3	7	2
Thailand	9	11	19	30
Trinidad & Tobago	9	7	15	7
Tunisia	2	2	5	4
Turkey	7	5	12	9
Uruguay	10	5	15	5
<i>average (unweighted)</i>	8	6	13	8
Innovation-driven economies	%	%	%	%
Austria	7	3	10	8
Belgium	3	2	5	5
Denmark	3	2	5	3
Finland	3	3	6	8
France	4	2	5	3
Germany	4	2	5	5
Greece	4	3	7	12
<b>Ireland</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>8</b>
Israel	3	3	7	4
Italy	2	2	4	3
Japan	2	2	4	6
Republic of Korea	3	4	7	10
Netherlands	4	6	10	9
Norway	4	3	7	6
Portugal	4	4	8	6
Singapore	8	4	12	3
Slovakia	7	4	10	6
Slovenia	3	3	5	6
Spain	3	2	6	9
Sweden	5	2	6	5
Switzerland	3	3	6	8
Taiwan	3	4	8	10
United Kingdom	5	4	9	6
United States	9	4	13	9
<i>average (unweighted)</i>	4	3	7	7

